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OM protein - protein search, using sw model

Run on: April 19, 2006, 11:56:31 ; Search time 159.884 Seconds
(without alignments)
1852.232 Million cell updates/sec

Title: US-10-775-180-447

Perfect score: 3568
Sequence: 1 NMIFRIFPLFPLSPVQGLHRT.....TCFARBGKLVAAASQALGL 674

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2443163 seqs, 439378781 residues

Total number of hits satisfying chosen parameters: 2443163

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-Processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_21.*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*
9: geneseqp2005s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3568	100.0	674	7	ADP16193 Human alb
2	3568	100.0	674	7	ADH21650 Human alb
3	3568	100.0	674	9	ADM45202 K. lactis
4	3568	100.0	915	9	ADM45204 K. lactis
5	3444.5	96.5	669	7	ADP16144 Human alb
6	3444.5	96.5	669	7	ADH21622 Human alb
7	3444	96.5	730	7	ADP16525 Human alb
8	3444	96.5	730	7	ADH21813 Human alb
9	3438.5	96.4	669	7	ADP16150 Human alb
10	3438.5	96.4	669	7	ADH21628 Human alb
11	3438	96.4	730	7	ADP16527 Human alb
12	3438	96.4	730	7	ADH21815 Human alb
13	3432.5	96.2	669	7	ADP16149 Human alb
14	3432.5	96.2	669	7	ADP16148 Human alb
15	3432.5	96.2	669	7	ADP16145 Human alb
16	3432.5	96.2	669	7	ADP16146 Human alb
17	3432.5	96.2	669	7	ADH21624 Human alb
18	3432.5	96.2	669	7	ADH21626 Human alb
19	3432.5	96.2	669	7	ADH21623 Human alb
20	3432.5	96.2	669	7	ADH21627 Human alb
21	3427	96.0	668	7	ADP16524 Human alb
22	3427	96.0	668	7	ADH21812 Human alb
23	3422	95.9	662	7	ADP16526 Human alb
24	3422	95.9	662	7	ADH21814 Human alb

25	3421	95.9	668	7	ADP16528 Human alb
26	3421	95.9	668	7	ADH21816 Human alb
27	3420.5	95.9	664	7	ADP16510 Human alb
28	3420.5	95.9	664	7	ADH21801 Human alb
29	3418.5	95.8	663	7	ADP16512 Human alb
30	3418.5	95.8	663	7	ADH21803 Human alb
31	3416	95.7	662	7	ADP16529 Human alb
32	3416	95.7	662	7	ADH21817 Human alb
33	3414.5	95.7	664	7	ADP16511 Human alb
34	3414.5	95.7	664	7	ADH21802 Human alb
35	3413.5	95.7	667	7	ADP16147 Human alb
36	3413.5	95.7	667	7	ADH21625 Human alb
37	3412.5	95.6	663	7	ADP16513 Human alb
38	3412.5	95.6	663	7	ADH21804 Human alb
39	3401	95.3	658	9	ADM45206 K. lactis
40	3395	95.2	654	9	ADM45215 K. lactis
41	3395	95.2	656	9	ADM45221 K. lactis
42	3393	95.1	650	9	ADM45205 K. lactis
43	3392.5	95.1	655	9	ADM45216 K. lactis
44	3392.5	95.1	657	9	ADM45212 K. lactis
45	3392.5	95.1	657	9	ADM45299 Human fus

ALIGNMENTS

RESULT 1
ADP16193
ID ADP16193 standard; protein; 674 AA.
XX
AC ADP16193;
XX
AC
XX
DT 12-FEB-2004 (first entry)
XX
DE Human albumin therapeutic fusion protein SegID1280.
XX
KW albumin fusion protein; albumin activity; human serum albumin;
KW serum osmotic pressure; shelf-life; stability; antidiabetic;
KW gene therapy; diabetes mellitus; human.
XX
XX Chimeric.
OS Homo sapiens.
OS
XX MO2003060071-A2.
XX
PD 24-JUL-2003.
XX
XX 23-DEC-2002; 2002WO-US040891.
XX
PR 21-DEC-2001; 2001US-0341811P.
PR 24-JAN-2002; 2002US-0350358P.
PR 28-JAN-2002; 2002US-0351360P.
PR 26-FEB-2002; 2002US-0359370P.
PR 28-FEB-2002; 2002US-0360000P.
PR 27-MAR-2002; 2002US-0367500P.
PR 08-APR-2002; 2002US-0370227P.
PR 10-MAY-2002; 2002US-0378950P.
PR 10-MAY-2002; 2002US-0382617P.
PR 24-MAY-2002; 2002US-0383123P.
PR 28-JUN-2002; 2002US-0385708P.
PR 05-JUN-2002; 2002US-0394625P.
PR 10-JUL-2002; 2002US-0398008P.
PR 24-JUL-2002; 2002US-0402131P.
PR 09-AUG-2002; 2002US-0402708P.
PR 13-AUG-2002; 2002US-0411355P.
PR 18-SEP-2002; 2002US-0411426P.
PR 02-OCT-2002; 2002US-0414984P.
PR 11-OCT-2002; 2002US-0417611P.
PR 23-OCT-2002; 2002US-0420246P.
PR 05-NOV-2002; 2002US-0423623P.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
PA (DELZ) DELTA BIOTECHNOLOGY LTD.

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2005 018 6669

PA (PRINT) PRINCIPAL PHARM CORP.
 XX
 XX Balance DJ, Turner AJ, Rosen CA, Haseltine WA;
 XX WPI; 2003-598517/56.
 DR
 XX New albumin fusion protein, useful for preparing a composition for
 PT treating diabetes mellitus.
 XX
 XX Example 4; SEQ ID NO 1280; 24pp; English.
 XX
 XX This invention relates to a novel albumin fusion protein having albumin
 CC or biological activity. Human serum albumin is responsible for a
 CC significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion of
 CC albumin to a therapeutic protein may increase shelf-life and stability of
 CC the therapeutic protein. The albumin fusion protein of the invention may
 CC allow production of compositions with antidiabetic activity whilst the
 CC nucleotide sequence which encodes it may be useful for gene therapy. The
 CC albumin fusion protein is useful for preparing a composition for treating
 CC diabetes mellitus. The present sequence is the amino acid sequence of a
 CC novel full-length human albumin therapeutic fusion protein of the
 CC invention. Note: The sequence data for this patent did not form part of
 CC the printed specification, but was obtained in electronic format directly
 CC from WIDO at ftp.wipo.int/pub/publishsedpct_sequences
 CC
 XX
 XX Sequence 674 AA:
 SQ
 Query Match 100.0%; Score 3568; DB 7; Length 674;
 Best Local Similarity 100.0%; Pred. No. 3,8e-293; Indels 0; Gaps 0;
 Matches 674; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 601 DICTLSBKERQIKKQJALVELVHKHPKATKQDLKAVMDPFAAFVFKCKKADKTCFAEB 660
 QY 661 GKLVAAASQAAIGL 674
 DB 661 GKLVAAASQAAIGL 674
 RESULT 2
 ADH21650
 ID ADH21650 standard; protein; 674 AA.
 AC ADH21650;
 DT 11-MAR-2004 (first entry)
 DE Human albumin/GLP-1(7-36(A8G))x2 fusion protein, SEQ ID NO:447.
 XX
 XX FUSION PROTEIN; HUMAN SERUM ALBUMIN; HSA; THERAPEUTIC PROTEIN;
 KW shelf-life; in vitro biological activity; in vivo biological activity;
 KW metabolic disorder; endocrine disorder; diabetes; type 1; type 2;
 KW diabetes-related condition; hyperglycaemia; neural disorder; neuropathy;
 KW retinopathy; cardiovascular disorder; heart disease; renal disorder;
 KW obesity; glucose level maintenance; weight loss; antidiabetic; cardiac;
 KW anorectic; ophthalmological; gene therapy.
 XX
 XX Synthetic.
 OS Chimeric.
 OS Homo sapiens.
 XX
 XX W02003059934-A2.
 PN
 XX
 PD 24-JUL-2003.
 XX
 PF 23-DEC-2002; 2002WO-US040892.
 XX
 XX 21-DEC-2001; 2001US-0341811P.
 XX 26-JAN-2002; 2002US-0350358P.
 XX 26-FEB-2002; 2002US-0359370P.
 XX 28-FEB-2002; 2002US-0360000P.
 XX 27-MAR-2002; 2002US-0367500P.
 XX 08-APR-2002; 2002US-0370227P.
 XX 10-MAY-2002; 2002US-0378950P.
 XX 24-JUL-2002; 2002US-0398088P.
 XX 09-AUG-2002; 2002US-0402131P.
 XX 13-AUG-2002; 2002US-0402708P.
 XX 18-SEP-2002; 2002US-0411355P.
 XX 02-OCT-2002; 2002US-041984P.
 XX 11-OCT-2002; 2002US-0417611P.
 XX 23-OCT-2002; 2002US-0420246P.
 XX 05-NOV-2002; 2002US-0423623P.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 XX Rosen CA, Haseltine WA;
 PI WPI; 2003-598501/56.
 DR
 XX New albumin fusion protein, useful for preparing a composition for
 PT treating diabetes mellitus.
 XX
 XX Disclosure; SEQ ID NO 447; 1086pp; English.
 XX
 XX The invention relates to fusion proteins comprising human serum albumin
 CC (ADH21530) and a therapeutic polypeptide such as a therapeutic protein,
 CC antibody or peptide or their variants or fragments. The therapeutic
 CC protein may be fused to the N-terminus, the C-terminus or both termini of
 CC albumin via a linker. The albumin component of the fusion proteins
 CC prolongs the shelf-life and the in vitro and vivo biological activity of
 CC the proteins compared with those of the corresponding therapeutic
 CC proteins on their own. The invention also relates to nucleic acids
 CC encoding albumin fusion proteins, vectors and host cells comprising an
 CC albumin fusion protein nucleic acid, compositions and kits comprising an

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albumin fusion protein, the method of extending the shelf-life of a therapeutic protein by fusion with albumin, and the treatment of disease using an albumin fusion protein. The albumin fusion proteins may be used in the treatment of metabolic/endocrine disorders, diabetes and diabetes-related conditions. Specifically the albumin fusion proteins may be used to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders (especially neuropathy), retinopathy, cardiovascular disorders (especially heart disease, renal disorders and obesity). The proteins may also be used in a method of maintaining a basal glucose level in a patient and in a method for losing weight. The present sequence is related to the invention.

Sequence 674 AA:
 Query Match 100.0%; Score 3568; DB 7; Length 674;
 Best Local Similarity 100.0%; Pred. No. 3.8e-293;
 Matches 674; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 MNIFYFLFLSLFVQGLHHTRRGSLDKRHGEGFTSDVSYLEGQAARFIAMLVKGRH 60
 1 MNIFYFLFLSLFVQGLHHTRRGSLDKRHGEGFTSDVSYLEGQAARFIAMLVKGRH 60
 61 GEGFTSDVSYLEGQAARFIAMLVKGRHSEVAHREPKDLEBENFKALVLIAPAOYL 120
 61 GEGFTSDVSYLEGQAARFIAMLVKGRHSEVAHREPKDLEBENFKALVLIAPAOYL 120
 121 QCCPFEDHVKLVNEVTEPAKTCVADSEANEDYSIHTLFDGKICTVAATLRETYGEMADCC 180
 121 QCCPFEDHVKLVNEVTEPAKTCVADSEANEDYSIHTLFDGKICTVAATLRETYGEMADCC 180
 181 AKQEPRENEGFLHDKDNPMLPRLVREPVVNCFAHFHNEETFLKYLVEIARRHPFYFA 240
 181 AKQEPRENEGFLHDKDNPMLPRLVREPVVNCFAHFHNEETFLKYLVEIARRHPFYFA 240
 241 PELLFPAKRYKAAFTTECCQAADRAACILPKLDELIRDEGKASSAKORLCKASLQKFERAP 300
 241 PELLFPAKRYKAAFTTECCQAADRAACILPKLDELIRDEGKASSAKORLCKASLQKFERAP 300
 301 KAAVAVARLSQRPKAEFAVSKLVTDITKVTTECGHDLLECADDRADLAKYICENDDSI 360
 301 KAAVAVARLSQRPKAEFAVSKLVTDITKVTTECGHDLLECADDRADLAKYICENDDSI 360
 361 SSKLKECCERPLLEKSHCIAVENDEMPADLPSLAADPFBVESHKVCCKRYAKAKDVFGLMFL 420
 361 SSKLKECCERPLLEKSHCIAVENDEMPADLPSLAADPFBVESHKVCCKRYAKAKDVFGLMFL 420
 421 YEYARRHPDYSVLLILAKTYETTLERKCAAADPHECVAKVPEDEPKLVEBPQNLIKON 480
 421 YEYARRHPDYSVLLILAKTYETTLERKCAAADPHECVAKVPEDEPKLVEBPQNLIKON 480
 481 CELFEOIGBYKFNALLIVRTKRVPOVSTPLVYEVSNLGVGSKCCCKHPBAKMPGAE 540
 481 CELFEOIGBYKFNALLIVRTKRVPOVSTPLVYEVSNLGVGSKCCCKHPBAKMPGAE 540
 541 YLSVWLNOLCVLHEKTPVSRVWVKCCPESLIVNRRPCCSALAEVDETYVPEKFNATPETHA 600
 541 YLSVWLNOLCVLHEKTPVSRVWVKCCPESLIVNRRPCCSALAEVDETYVPEKFNATPETHA 600
 601 DICTLSEKERQIKKQALVELVKHPRATKEQLKAVWDDPAAFEVCKCKADDKETCPAAE 660
 601 DICTLSEKERQIKKQALVELVKHPRATKEQLKAVWDDPAAFEVCKCKADDKETCPAAE 660
 661 GKXUVAASQAALGL 674
 661 GKXUVAASQAALGL 674

RESULT 3
 ADM45202
 ID ADM45202 standard; protein; 674 AA.
 XX
 AC ADM45202;
 XX

DT 07-APR-2005 (first entry) SEQ 206.
 XX K. lactis killer toxin-Glp1-human serum albumin fusion protein
 DE fusion protein; anti-HIV; gastrointestinal-gen.; antidiabetic; anorectic;
 XX nephrotropic; cardiant; cytostatic; neuroprotective; immunosuppressive;
 KW immune disorder; hematological disease; hyperproliferative disorder;
 KW renal disease; cardiovascular disease; cardiovascular-gen.;
 KW respiratory disorder; angiogenesis disorder; neurological disease;
 KW wound healing; vulnery; endocrine disease; reproductive disorder;
 KW gynecological; infectious disease; antimicrobial;
 KW gastrointestinal disease; gene therapy; toxin; HSA; albumin;
 KW glucagon-like peptide 1; Glp1.
 XX Homo sapiens.
 XX Kluverermyces lactis.
 OS Chimeric.
 XX MO2005003296-A2.
 XX 13-JAN-2005.
 XX 20-JAN-2004; 2004MO-US001369.
 XX 22-JAN-2003; 2003US-0441305P.
 PR 11-MAR-2003; 2003US-0453201P.
 PR 02-MAY-2003; 2003US-0467222P.
 PR 23-MAY-2003; 2003US-0472816P.
 PR 06-JUN-2003; 2003US-0476267P.
 PR 24-SEP-2003; 2003US-0505172P.
 PR 30-SEP-2003; 2003US-0506746P.
 XX (HUMA-) HUMAN GENOME SCI INC.
 XX Haseltine WA, Rosen CA;
 XX WPI; 2005-091786/10.
 XX New albumin fusion protein for diagnosing, treating or preventing
 PT diseases such as HIV/AIDS, diabetes, obesity, heart disease or immune
 PT disorders comprising a therapeutic protein (e.g. CD4M33, Glp-2 or PACAP-
 PT 27) and an albumin.
 XX Example 13; SEQ ID NO 206; 884bp; English.
 PS The invention relates to a novel albumin fusion protein comprising a
 CC therapeutic protein as listed in the specification in Table 1 and an
 CC albumin comprising a sequence of SEQ ID NO: 1, or a fragment or variant
 CC of SEQ ID NO: 1, where the fragment or variant has albumin activity and
 CC where the albumin activity is the ability to prolong the shelf life of
 CC the therapeutic protein compared to the shelf-life of the therapeutic
 CC protein in an unused state. Human serum albumin (HSA, HA) is responsible
 CC for a significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion
 CC protein of the invention demonstrates anti-HIV, gastrointestinal-gen.,
 CC antidiabetic, anorectic, cardiant and immunosuppressive activities. The
 CC fusion protein may be useful for diagnosing, treating, preventing or
 CC ameliorating diseases, such as immune disorders, blood disorders,
 CC hyperproliferative disorders, renal disorders, cardiovascular disorders,
 CC respiratory disorders, angiogenesis-related disorders, neurological
 CC disorders, wound healing disorders, endocrine disorders, reproductive
 CC disorders, infectious disorders and gastrointestinal disorders, possibly
 CC with the use of gene therapy techniques. The current sequence is that of
 CC the Kluverermyces lactis killer toxin-Glp1-human serum albumin fusion
 CC protein - SEQ 206 of the invention.
 XX Sequence 674 AA:
 XX Query Match 100.0%; Score 3568; DB 9; Length 674;
 XX Best Local Similarity 100.0%; Pred. No. 3.8e-293;
 XX Matches 674; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

2006/06/14 25
 11/175-690

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Db      1 MNIFITFLFLSFGVGLBHTHRGSLDRKHGGTFTSDVSSYLEGQAAKEFTAMLVKGRH
Qy      61 GEGTFTSDVSSYLEGQAAKEFTAMLVKGRDAKHSVAHRFKDLGSENFKALVLIAPQYL 120
Db      61 GEGTFTSDVSSYLEGQAAKEFTAMLVKGRDAKHSVAHRFKDLGSENFKALVLIAPQYL 120
Qy      121 QCCPEPDHVKLVNEVTEFAKTCVADESANCDKSLHTLFGDKLCTVATLRETYGEMADCC 180
Db      121 QCCPEPDHVKLVNEVTEFAKTCVADESANCDKSLHTLFGDKLCTVATLRETYGEMADCC 180
Qy      181 AKQEBERNKCFLOHKDDNPNLPRLYRPEVDVWCCTAFHNDNEFTLKKYLYETARRRHPYFA 240
Db      181 AKQEBERNKCFLOHKDDNPNLPRLYRPEVDVWCCTAFHNDNEFTLKKYLYETARRRHPYFA 240
Qy      241 PELLFPARKYKAAFTCCOAAADKAACTLPKLDLDELDEBKGASSAKORLKCASLQKGERAF 300
Db      241 PELLFPARKYKAAFTCCOAAADKAACTLPKLDLDELDEBKGASSAKORLKCASLQKGERAF 300
Qy      301 KAMAVALRSLGQRPKAEFAVSKLVTDLTKVHTTECHGDLLLEGADRDADLAKYICENODSI 360
Db      301 KAMAVALRSLGQRPKAEFAVSKLVTDLTKVHTTECHGDLLLEGADRDADLAKYICENODSI 360
Qy      361 SSKLKECCCKPILKESHCTAEVNDMPADLPSLAADFTVESKDYCKNYAEADVFLGMPFL 420
Db      361 SSKLKECCCKPILKESHCTAEVNDMPADLPSLAADFTVESKDYCKNYAEADVFLGMPFL 420
Qy      421 YVYARRHPDYSVLLRLAKTETTTLEKCCAAADPHCEYAKVDEPKPIVEBPONLIKON 480
Db      421 YVYARRHPDYSVLLRLAKTETTTLEKCCAAADPHCEYAKVDEPKPIVEBPONLIKON 480
Qy      481 CELFELGEGYKQNALVRYTKKPVQVSTPTLVESRNLYKGVSKCCCKRPAKRMPCAD 540
Db      481 CELFELGEGYKQNALVRYTKKPVQVSTPTLVESRNLYKGVSKCCCKRPAKRMPCAD 540
Qy      541 YLSVAVINQLCVLHEKTPVSDRYTKCTESLVNRRPEFSALAEVDYRYVYKFNAAETTFPA 600
Db      541 YLSVAVINQLCVLHEKTPVSDRYTKCTESLVNRRPEFSALAEVDYRYVYKFNAAETTFPA 600
Qy      601 DICTLSEKERQIKQFALVELVGHKPKATYKOLKAVMDPFAFVKECKKADDKETCFABE 660
Db      601 DICTLSEKERQIKQFALVELVGHKPKATYKOLKAVMDPFAFVKECKKADDKETCFABE 660
Qy      661 GKGLVAASQAALGL 674
Db      661 GKGLVAASQAALGL 674

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RESULT 4
ADM45204 standard; protein; 915 AA.
XX      ADM45204;
XX      07-APR-2005 (first entry)
K. lactis killer toxin-GP1-HSA-GFP tag fusion protein - SEQ ID 208.
K. lactis killer toxin-GP1-HSA-GFP tag fusion protein - SEQ ID 208.
fusion protein; anti-HIV; gastroinfective; anti-diabetic; anorectic;
nephrotoxic; cardiant; cytostatic; neuroprotective; immunosuppressive;
immune disorder; hematological disease; hyperproliferative disorder;
renal disease; cardiovascular disease; cardiovascular-gen.;
respiratory disorder; angiogenesis disorder; neurological disease;
wound healing; vulnary; endocrine disease; reproductive disorder;
gynecological; infectious disease; antimicrobial;
gastrointestinal disease; gene therapy; toxin; HSA; albumin;
glucagon-like peptide 1; GLP1.
Homo sapiens.
Kluyveromyces lactis.
Chimeric.
MO2005003296-A2.

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XX      13-JAN-2005.
XX      20-JAN-2004; 2004MO-US001369.
XX      22-JAN-2003; 2003US-0441305P.
XX      11-MAR-2003; 2003US-0453201P.
XX      02-MAY-2003; 2003US-0467222P.
XX      23-MAY-2003; 2003US-0472816P.
XX      06-JUN-2003; 2003US-0476267P.
XX      24-SEP-2003; 2003US-0505172P.
XX      30-SEP-2003; 2003US-0506746P.
XX      (HOMA-) HUMAN GENOME SCI INC.
XX      Haseltine WA, Rosen CA;
XX      WPI; 2005-091786/10.
XX      New albumin fusion protein for diagnosing, treating or preventing
XX      diseases such as HIV/AIDS, diabetes, obesity, heart disease or immune
XX      disorders comprises a therapeutic protein (e.g. CD4M33, GLP-2 or PACAP-
XX      27) and an albumin.
XX      Example 13; SEQ ID NO 208; 884pp; English.
XX      The invention relates to a novel albumin fusion protein comprising a
XX      therapeutic protein as listed in the specification in Table 1 and an
XX      albumin comprising a sequence of SEQ ID NO: 1, or a fragment or variant
XX      of SEQ ID NO: 1, where the fragment or variant has albumin activity and
XX      where the albumin activity is the ability to prolong the shelf life of
XX      the therapeutic protein compared to the shelf-life of the therapeutic
XX      protein in an unfused state. Human serum albumin (HSA, HA) is responsible
XX      for a significant proportion of the osmotic pressure of serum and also
XX      functions as a carrier of endogenous and exogenous ligands. The fusion
XX      protein of the invention demonstrates anti-HIV, gastrointestinal-gen.,
XX      anti-diabetic, anorectic, cardiant and immunosuppressive activities. The
XX      fusion protein may be useful for diagnosing, treating, preventing or
XX      ameliorating diseases, such as immune disorders, blood disorders,
XX      hyperproliferative disorders, renal disorders, cardiovascular disorders,
XX      respiratory disorders, angiogenesis-related disorders, neurological
XX      disorders, wound healing disorders, endocrine disorders, reproductive
XX      disorders, infectious diseases and gastrointestinal disorders, possibly
XX      with the use of gene therapy techniques. The current sequence is that of
XX      the Kluyveromyces lactis Killer toxin-GP1-HSA-GFP tag fusion protein -
XX      SEQ ID 208 of the invention.
XX      Sequence 915 AA;
XX      Query Match 100.0%; Score 3568; DB 9; Length 915;
XX      Best Local Similarity 100.0%; Pred. No. 5.7e-233;
XX      Matches 674; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 301 KAAVAARLSORPPKAEFAEYSKLVTDLTKVHTCCGHDLEECADDRADLAKYICENQDSI 360
 DB 301 KAAVAARLSORPPKAEFAEYSKLVTDLTKVHTCCGHDLEECADDRADLAKYICENQDSI 360
 QY 361 SSRKKECEKPKLLEKSHCIAEVNDMPADLPSSLAADPVESKDVCKNYAAKQVFLGMFL 420
 DB 361 SSRKKECEKPKLLEKSHCIAEVNDMPADLPSSLAADPVESKDVCKNYAAKQVFLGMFL 420
 QY 421 YRARHPDYVYVLLIRLAKTYETTLERKCCAAADPHKCAKVDKPKLVBEPPQNLIKON 480
 DB 421 YRARHPDYVYVLLIRLAKTYETTLERKCCAAADPHKCAKVDKPKLVBEPPQNLIKON 480
 QY 481 CELFEOLEGEYKPNALLVRYTKKVPQVSTPTLVESRNIGKVGSKCKEPEAKRMPCAED 540
 DB 481 CELFEOLEGEYKPNALLVRYTKKVPQVSTPTLVESRNIGKVGSKCKEPEAKRMPCAED 540
 QY 541 YLSVVLNQLCVLHEKTPVSDRVTKCCSTESLVNRRPCFSALEVDVETVYVKEFNAETFFHA 600
 DB 541 YLSVVLNQLCVLHEKTPVSDRVTKCCSTESLVNRRPCFSALEVDVETVYVKEFNAETFFHA 600
 QY 601 DIGTISEKERQIKKQTLVAVLVEVHKRKAATKQIKAVMDPRAAVYKCKKADDKETCPAE 660
 DB 601 DIGTISEKERQIKKQTLVAVLVEVHKRKAATKQIKAVMDPRAAVYKCKKADDKETCPAE 660
 QY 661 GKRLVAASQALGL 674
 DB 661 GKRLVAASQALGL 674

RESULT 5

ADP16144
 ID ADP16144 standard; protein; 669 AA.
 AC ADP16144;

XX 12-FEB-2004 (first entry)

DE Human albumin therapeutic fusion protein SeqID1211.

XX albumin fusion protein; albumin activity; human serum albumin;
 KW serum osmotic pressure; shelf-life; stability; antidiabetic;
 KM gene therapy; diabetes mellitus; human.

OS Chimeric.
 OS Homo sapiens.

XX MO2003060071-A2.

PN 24-JUL-2003.

XX 23-DEC-2002; 2002WC-US040891.

PF 21-DEC-2001; 2001US-0341811P.

PR 24-JAN-2002; 2002US-0350358P.

PR 26-JAN-2002; 2002US-0351360P.

PR 26-FEB-2002; 2002US-0359370P.

PR 27-MAR-2002; 2002US-0360000P.

PR 08-APR-2002; 2002US-0370227P.

PR 10-MAY-2002; 2002US-0378950P.

PR 24-MAY-2002; 2002US-0382617P.

PR 28-MAY-2002; 2002US-0383123P.

PR 05-JUN-2002; 2002US-0394625P.
 PR 10-JUL-2002; 2002US-0394625P.
 PR 24-JUL-2002; 2002US-0398008P.
 PR 09-AUG-2002; 2002US-0402131P.
 PR 13-AUG-2002; 2002US-0402708P.
 PR 18-SEP-2002; 2002US-0411355P.
 PR 18-SEP-2002; 2002US-0411426P.
 PR 02-OCT-2002; 2002US-0414984P.
 PR 11-OCT-2002; 2002US-0417611P.
 PR 23-OCT-2002; 2002US-0420246P.
 PR 05-NOV-2002; 2002US-0423623P.

XX (HUMA-) HUMAN GENOME SCI INC.
 PA (DELTA) DELTA BIOTECHNOLOGY LTD.
 PA (PRIN-) PRINCIPAL PHARM CORP.
 PI Ballance DJ, Turner AJ, Rosen CA, Haseltine WA;
 XX WPI; 2003-598517/56.
 DR
 PT New albumin fusion protein, useful for preparing a composition for
 XX creating diabetes mellitus.
 XX
 XX Example 4; SEQ ID NO 1231; 24pp; English.
 XX
 XX This invention relates to a novel albumin fusion protein having albumin
 CC or biological activity. Human serum albumin is responsible for a
 CC significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion of
 CC albumin to a therapeutic protein may increase shelf-life and stability of
 CC the therapeutic protein. The albumin fusion protein of the invention may
 CC allow production of compositions with antidiabetic activity whilst the
 CC nucleotide sequence which encodes it may be useful for gene therapy. The
 CC albumin fusion protein is useful for preparing a composition for treating
 CC diabetes mellitus. The present sequence is the amino acid sequence of a
 CC novel full-length human albumin therapeutic fusion protein of the
 CC invention. Note: The sequence data for this patent did not form part of
 CC the printed specification, but was obtained in electronic format directly
 CC from WIPO at ftp.wipo.int/pub/publishedpct_sequences
 CC
 XX Sequence 669 AA;

Query Match

Best Local Similarity 97.3%; Score 3444.5; DB 7; Length 669;
 Pred. No. 1,le-282;
 Matches 654; Conservative 4; Mismatches 5; Indels 9; Gaps 1;

QY 3 IPYIFLPLLSVQGLRHTRRGSLDKRHGGSTFTSDVSSYLEGQAAKERIAMIYKGRHGE 62
 DB 7 ISLFLFSSAYSR-----SLDKRHGGSTFTSDVSSYLEGQAAKERIAMIYKGRHGE 57

QY 63 GPTTSVSSYLEGQAAKERIAMIYKGRDARHKEVVARHPFDIDENPKALVLAFAQYLQO 122
 DB 58 GPTTSVSSYLEGQAAKERIAMIYKGRDARHKEVVARHPFDIDENPKALVLAFAQYLQO 117

QY 123 CPPEHDVAVLNEVTEYFAKTCVADDESANCDKSIHTLFGDKLCTVATLRRTYGGMADCCAK 182
 DB 118 CPPEHDVAVLNEVTEYFAKTCVADDESANCDKSIHTLFGDKLCTVATLRRTYGGMADCCAK 177

QY 183 QEBERNCEFLQHKDNDPNI.PRLVRRPEVDVWCTAFHNDNETFLKCYLYEYIARRHPYIYAB 242
 DB 178 QEBERNCEFLQHKDNDPNI.PRLVRRPEVDVWCTAFHNDNETFLKCYLYEYIARRHPYIYAB 237

QY 243 LIFPAARVYAAFPTECCQAADKAACLIPKIDELARDEBKASASNAQRKLCASIQKGERAPFA 302
 DB 238 LIFPAARVYAAFPTECCQAADKAACLIPKIDELARDEBKASASNAQRKLCASIQKGERAPFA 297

QY 303 WAAVARSORPPKAEFAEYSKLVTDLTKVHTCCGHDLEECADDRADLAKYICENQDSISS 362
 DB 298 WAAVARSORPPKAEFAEYSKLVTDLTKVHTCCGHDLEECADDRADLAKYICENQDSISS 357

QY 363 KLKKECEKPKLLEKSHCIAEVNDMPADLPSSLAADPVESKDVCKNYAAKQVFLGMFLYE 422
 DB 358 KLKKECEKPKLLEKSHCIAEVNDMPADLPSSLAADPVESKDVCKNYAAKQVFLGMFLYE 417

QY 423 YRARHPDYVYVLLIRLAKTYETTLERKCCAAADPHKCAKVDKPKLVBEPPQNLIKONCE 482
 DB 418 YRARHPDYVYVLLIRLAKTYETTLERKCCAAADPHKCAKVDKPKLVBEPPQNLIKONCE 477

QY 483 LEFQLEGEYKPNALLVRYTKKVPQVSTPTLVESRNIGKVGSKCKEPEAKRMPCAEDYL 542
 DB 478 LEFQLEGEYKPNALLVRYTKKVPQVSTPTLVESRNIGKVGSKCKEPEAKRMPCAEDYL 537

QY 543 SVLVNQLCVLHEKTPVSDRVTKCCSTESLVNRRPCFSALEVDVETVYVKEFNAETFFHAD 602
 DB 543 SVLVNQLCVLHEKTPVSDRVTKCCSTESLVNRRPCFSALEVDVETVYVKEFNAETFFHAD 602

Db 538 SVLNLQLCVLRHEKTPVSDRVTCKCTESLIVNRRPCCSALAEVDDETVVYKPEFNAETFFHADI 597
 QY 603 CTLSEKERQIKKQTALVELVVKHKPRATKQQLKAVMDPFAAFVEKCCAKADDKETCPAEBEGK 662
 Db 598 CTLSEKERQIKKQTALVELVVKHKPRATKQQLKAVMDPFAAFVEKCCAKADDKETCPAEBEGK 657
 QY 663 KLVAAASQAALGL 674
 Db 658 KLVAAASQAALGL 669
 RESULT 6
 ADH21622
 ID ADH21622 standard; protein; 669 AA.
 XX ADH21622;
 AC 11-MAR-2004 (First entry)
 XX
 DT Human albumin/GLP-1(7-36)(A8G) fusion protein, SEQ ID NO:419.
 XX
 DE Human albumin/GLP-1(7-36)(A8G) fusion protein, SEQ ID NO:419.
 XX
 XX Fusion protein; human serum albumin; HSA; therapeutic protein;
 KW shelf-life; in vitro biological activity; in vivo biological activity;
 KW metabolic disorder; endocrine disorder; diabetes; type 1; type 2;
 KW diabetes-related condition; hyperglycemia; neural disorder; neuropathy;
 KW retinopathy; cardiovascular disorder; heart disease; renal disorder;
 KW obesity; glucose level maintenance; weight loss; antidiabetic; cardiant;
 KW anorectic; ophthalmological; gene therapy.
 XX
 OS Synthetic.
 OS Chimeric.
 OS Homo sapiens.
 XX
 XX MO2003059934-A2.
 XX
 PD 24-JUL-2003.
 XX
 XX 23-DEC-2002; 2002WO-US040892.
 PF
 XX 21-DEC-2001; 2001US-0341811P.
 PR 24-JAN-2002; 2002US-0350358P.
 PR 26-FEB-2002; 2002US-0359370P.
 PR 28-FEB-2002; 2002US-0360000P.
 PR 27-MAR-2002; 2002US-0367500P.
 PR 08-APR-2002; 2002US-0370227P.
 PR 10-MAY-2002; 2002US-0379950P.
 PR 24-JUL-2002; 2002US-0398008P.
 PR 09-AUG-2002; 2002US-0402131P.
 PR 13-AUG-2002; 2002US-0402708P.
 PR 18-SEP-2002; 2002US-0411355P.
 PR 02-OCT-2002; 2002US-0414984P.
 PR 11-OCT-2002; 2002US-0417611P.
 PR 23-OCT-2002; 2002US-0420262P.
 PR 05-NOV-2002; 2002US-0423623P.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 PI Rosen CA, Haseltine WA;
 XX
 XX WPI; 2003-598501/56.
 DR
 XX
 XX New albumin fusion protein, useful for preparing a composition for
 PT treating diabetes mellitus.
 PT
 XX
 PS Disclosure; SEQ ID NO 419; 1086pp; English.
 XX
 XX The invention relates to fusion proteins comprising human serum albumin
 CC (ADH21622) and a therapeutic polypeptide such as a therapeutic protein,
 CC antibody or peptide or their variants or fragments. The therapeutic
 CC protein may be fused to the N-terminus, the C-terminus or both termini of
 CC albumin via a linker. The albumin component of the fusion proteins
 CC prolongs the shelf-life and the in vitro and vivo biological activity of
 CC the proteins compared with those of the corresponding therapeutic

CC proteins on their own. The invention also relates to nucleic acids
 CC encoding albumin fusion proteins, vectors and host cells comprising an
 CC albumin fusion protein nucleic acid, compositions and kits comprising an
 CC albumin fusion protein, the method of extending the shelf-life of a
 CC therapeutic protein by fusion with albumin, and the treatment of disease
 CC using an albumin fusion protein. The albumin fusion proteins may be used
 CC in the treatment of metabolic/endocrine disorders, diabetes and diabetes-
 CC related conditions. Specifically the albumin fusion proteins may be used
 CC to treat type 1 and type 2 diabetes, hyperglycemia, neural disorders
 CC (especially neuropathy), retinopathy, cardiovascular disorders
 CC (especially heart disease, renal disorders and obesity). The proteins may
 CC also be used in a method of maintaining a basal glucose level in a
 CC patient and in a method for losing weight. The present sequence is
 CC related to the invention.
 XX
 SQ Sequence 669 AA;
 Query Match 96.5%; Score 3444.5; DB 7; Length 669;
 Best Local Similarity 97.3%; Pred. No. 1.1e-282;
 Matches 654; Conservative 4; Mismatches 5; Indels 9; Gaps 1;
 QY 3 IFYIFLPLISFVQGEHTHRKSLDKRHGEGFTSDVSSYLEGQAAKEFIAMLVKGRGGE 62
 Db 7 ISLILFSSASR-----SLDKRKGEGFTSDVSSYLEGQAAKEFIAMLVKGRGGE 57
 QY 63 GTFTSDVSSYLEGQAAKEFIAMLVKGRDAHSEVAHFKDVGSENFKALVLIAPQYIQO 122
 Db 58 GFTSDVSSYLEGQAAKEFIAMLVKGRDAHSEVAHFKDVGSENFKALVLIAPQYIQO 117
 QY 123 CPFEHDVNLVNVVEFPATKVADESAENCDLSIHTLFDGKCTVAITLAEPTGEMDDCCAK 182
 Db 118 CPFEHDVNLVNVVEFPATKVADESAENCDLSLHTLFDGKCTVAITLAEPTGEMDDCCAK 177
 QY 183 QEPERNCEFLQHKDNPMLPRLVREPVVMCTAFHDSNETFLKRYLVEIARRHPYFVAPE 242
 Db 178 QEPERNCEFLQHKDNPMLPRLVREPVVMCTAFHDSNETFLKRYLVEIARRHPYFVAPE 237
 QY 243 ILFFAKRYKAAFTCCQAAADKAACTLLPKLDELDRGKASAKORLCKASLQFGRARAKA 302
 Db 238 ILFFAKRYKAAFTCCQAAADKAACTLLPKLDELDRGKASAKORLCKASLQFGRARAKA 297
 QY 303 WAWARLSQRPPKAEFAEVSKLVTDLTKVHTTECHGDLLECADDRADLAKYICENODSIS 362
 Db 298 WAWARLSQRPPKAEFAEVSKLVTDLTKVHTTECHGDLLECADDRADLAKYICENODSIS 357
 QY 363 KLEKCEKPELLEKSHCIAEVENDEMPADLPISLAADPVYSKQVCKRYAARAKOVFLGMPLYE 422
 Db 358 KLEKCEKPELLEKSHCIAEVENDEMPADLPISLAADPVYSKQVCKRYAARAKOVFLGMPLYE 417
 QY 423 YARRHPDYSVVLILRLAKTYETTLLEKCCAAADPHECVAKVPEDEKPLVBEPPNLIKONCE 482
 Db 418 YARRHPDYSVVLILRLAKTYETTLLEKCCAAADPHECVAKVPEDEKPLVBEPPNLIKONCE 477
 QY 483 LFEQIGEVKFGVALLVRYTKKVPQVSTPLVAVSNTLAKVSGCKCKHBAKMPDABDYL 542
 Db 478 LFEQIGEVKFGVALLVRYTKKVPQVSTPLVAVSNTLAKVSGCKCKHBAKMPDABDYL 537
 QY 543 SVLNLQLCVLRHEKTPVSDRVTCKCTESLIVNRRPCCSALAEVDDETVVYKPEFNAETFFHADI 602
 Db 538 SVLNLQLCVLRHEKTPVSDRVTCKCTESLIVNRRPCCSALAEVDDETVVYKPEFNAETFFHADI 597
 QY 603 CTLSEKERQIKKQTALVELVVKHKPRATKQQLKAVMDPFAAFVEKCCAKADDKETCPAEBEGK 662
 Db 598 CTLSEKERQIKKQTALVELVVKHKPRATKQQLKAVMDPFAAFVEKCCAKADDKETCPAEBEGK 657
 QY 663 KLVAAASQAALGL 674
 Db 658 KLVAAASQAALGL 669
 RESULT 7
 ADH16525
 ID ADH16525 standard; protein; 730 AA.

XX ADP16525;
 XX 12-FEB-2004 (first entry)
 XX Human albumin therapeutic fusion protein seqID1622.
 DE albumin fusion protein; albumin activity; human serum albumin;
 KW serum osmotic pressure; shelf-life; stability; antidiabetic;
 KM gene therapy; diabetes mellitus; human.
 XX Chimeric.
 OS Homo sapiens.
 XX MO2003060071-A2.
 XX 24-JUL-2003.
 XX 23-DEC-2002; 2002WO-US040891.
 XX 21-DEC-2001; 2001US-0341811P.
 XX 24-JAN-2002; 2002US-0350338P.
 XX 28-JUN-2002; 2002US-0351360P.
 XX 26-FEB-2002; 2002US-0359370P.
 XX 28-FEB-2002; 2002US-0360000P.
 XX 27-MAR-2002; 2002US-0367500P.
 XX 08-APR-2002; 2002US-0370227P.
 XX 10-MAY-2002; 2002US-0378950P.
 XX 24-MAY-2002; 2002US-0382123P.
 XX 28-MAY-2002; 2002US-0383133P.
 XX 05-JUN-2002; 2002US-0385708P.
 XX 10-JUL-2002; 2002US-0394462P.
 XX 24-JUL-2002; 2002US-0398008P.
 XX 09-AUG-2002; 2002US-0402131P.
 XX 13-AUG-2002; 2002US-0402708P.
 XX 18-SEP-2002; 2002US-0411355P.
 XX 02-OCT-2002; 2002US-0414984P.
 XX 11-OCT-2002; 2002US-0417611P.
 XX 23-OCT-2002; 2002US-0420246P.
 XX 05-NOV-2002; 2002US-0423623P.
 XX (HUMA-) HUMAN GENOME SCI INC.
 PA (DELTA) DELTA BIOTECHNOLOGY LTD.
 PA (PRIN-) PRINCIPAL PHARM CORP.
 XX Ballance DJ, Turner AJ, Rosen CA, Haseltine WA;
 XX WPI; 2003-598517/56.
 XX New albumin fusion protein, useful for preparing a composition for
 PT treating diabetes mellitus.
 XX Example 4; SEQ ID NO 1622; 24pp; English.
 XX This invention relates to a novel albumin fusion protein having albumin
 CC or biological activity. Human serum albumin is responsible for a
 CC significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion of
 CC albumin to a therapeutic protein may increase shelf-life and stability of
 CC the therapeutic protein. The albumin fusion protein of the invention may
 CC allow production of compositions with antidiabetic activity whilst the
 CC nucleotide sequence which encodes it may be useful for gene therapy. The
 CC albumin fusion protein is useful for preparing a composition for treating
 CC diabetes mellitus. The present sequence is the amino acid sequence of a
 CC novel full-length human albumin therapeutic fusion protein of the
 CC invention. Note: The sequence data for this patent did not form part of
 CC the printed specification, but was obtained in electronic format directly
 CC from WIPO at ftp.wipo.int/pub/publ/ihedpct_sequences
 XX Sequence 730 AA;

Query Match 96.5%; Score 3444; DB 7; Length 730;

Best Local Similarity 97.8%; Pred. No. 1.4e-282;
 Matches 652; Conservative 4; Mismatches 11; Indels 0; Gaps 0;

QY 8 LPILSFVQGLERTHRRGSLDKRRGGSTFTSDVSSYLEGQAAKEFIALMVKGRHGGSTPFS 67
 64 LPIINTTIAISIAKKEBGSVSLDKRHBGTFPSVSSYLEGQAAKEFIALMVKGRHGGSTPFS 123
 QY 68 DVSSYLEGQAAKEFIALMVKGRDANKSEVAHHRFKDIEENFALVLIARAQYLQCCPFED 127
 124 DVSSYLEGQAAKEFIALMVKGRDANKSEVAHHRFKDIEENFALVLIARAQYLQCCPFED 183
 QY 128 HVKLVNVEVTEFAKTCVADSESAENCDKSLHTLTFGDKICTVAITLRETYGEMADCCAKOEPER 187
 184 HVKLVNVEVTEFAKTCVADSESAENCDKSLHTLTFGDKICTVAITLRETYGEMADCCAKOEPER 243
 QY 188 NRCGLQHKDNDPRLPRLVPRVVDVWCTAFHNDDETFELKRYLYEIAARRHFFYAPPELLFPA 247
 244 NRCGLQHKDNDPRLPRLVPRVVDVWCTAFHNDDETFELKRYLYEIAARRHFFYAPPELLFPA 303
 QY 248 KRYKAAFTECCQAAADRAACILPRLDELDEGKASSAKQRLKCSLQKFGERRAFKAAVAAR 307
 304 KRYKAAFTECCQAAADRAACILPRLDELDEGKASSAKQRLKCSLQKFGERRAFKAAVAAR 363
 QY 308 LSGRPPKAPFAEVSQKLVTDLTKVHTESCCHGDLLECADPRAADLAKYICENODSISSTLKGC 367
 364 LSGRPPKAPFAEVSQKLVTDLTKVHTESCCHGDLLECADPRAADLAKYICENODSISSTLKGC 423
 QY 368 CEKPLLEKSHCTAEVNDENMPADLPELADPVESHKVCNRYAEAKDVPFGMPLIYEXARRH 427
 424 CEKPLLEKSHCTAEVNDENMPADLPELADPVESHKVCNRYAEAKDVPFGMPLIYEXARRH 483
 QY 428 PDYSVVLLRLAKTYETTELKCCAAADPHECVAKVDFEPKPLVEEPPQNLIKONCELEFQD 487
 484 PDYSVVLLRLAKTYETTELKCCAAADPHECVAKVDFEPKPLVEEPPQNLIKONCELEFQD 543
 QY 488 GEYKFNALLVRYTKKVPQVSTPTLVEVSRLTGKVGSKCKKPEEARMPGADYLSVLTN 547
 544 GEYKFNALLVRYTKKVPQVSTPTLVEVSRLTGKVGSKCKKPEEARMPGADYLSVLTN 603
 QY 548 QLCVLIHEKTPVSPRYTKCCTESLVNRRPCPSALREVDYTVPRPFNAPETPHADICTLSE 607
 604 QLCVLIHEKTPVSPRYTKCCTESLVNRRPCPSALREVDYTVPRPFNAPETPHADICTLSE 663
 QY 608 KERQIKKQALVYELVNHKPKATKEQLKAVWDDPAALFVTEKCCRAADDKXETCFAREGKQLVA 667
 664 KERQIKKQALVYELVNHKPKATKEQLKAVWDDPAALFVTEKCCRAADDKXETCFAREGKQLVA 723
 QY 668 SQAAALGI 674
 724 SQAAALGI 730
 Db

RESULT 8
 ADH21813
 ID ADH21813 standard; protein; 730 AA.
 XX
 AC ADH21813;
 DT 11-MAR-2004 (first entry)
 XX Human albumin/GDP-1(7-36(A8G)) fusion protein, SEQ ID NO:610.
 DE Fusion protein; human serum albumin; HSA; therapeutic protein;
 KM shelf-life; in vitro biological activity; in vivo biological activity;
 KM metabolic disorder; endocrine disorder; diabetes; type 1; type 2;
 KM diabetes-related condition; hyperglycaemia; neural disorder; neuropathy;
 KM retinopathy; cardiovascular disorder; heart disease; renal disorder;
 KM obesity; glucose level maintenance; weight loss; antidiabetic; cardiac;
 KM anorectic; ophthalmological; gene therapy.
 XX Synthetic.
 OS Chimeric.
 OS Homo sapiens.

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XX  WO2003059934-A2.
XX
XX  24-JUL-2003.
XX
XX  23-DEC-2002; 2002WO-US040892.
XX
XX  21-DEC-2001; 2001US-0341811P.
XX  24-JAN-2002; 2002US-0350358P.
XX  26-FEB-2002; 2002US-0359370P.
XX  28-FEB-2002; 2002US-0360000P.
XX  27-MAR-2002; 2002US-0367500P.
XX  08-APR-2002; 2002US-0370227P.
XX  10-MAY-2002; 2002US-0378950P.
XX  24-JUL-2002; 2002US-0398008P.
XX  09-AUG-2002; 2002US-0402131P.
XX  13-AUG-2002; 2002US-0402708P.
XX  18-SEP-2002; 2002US-0411355P.
XX  02-OCT-2002; 2002US-0414984P.
XX  11-OCT-2002; 2002US-0417611P.
XX  23-OCT-2002; 2002US-0420246P.
XX  05-NOV-2002; 2002US-0422623P.
XX
XX  (HUMA-) HUMAN GENOME SCI INC.
XX
XX  Rosen CA, Haseeltine WA;
XX
XX  MPI; 2003-598501/56.
XX
XX  New albumin fusion protein, useful for preparing a composition for
XX  treating diabetes mellitus.
XX
XX  Disclosure; SEQ ID NO 610; 1086pp; English.
XX
XX  The invention relates to fusion proteins comprising human serum albumin
XX  (ADH21530) and a therapeutic polypeptide such as a therapeutic protein,
XX  antibody or peptide or their variants or fragments. The therapeutic
XX  protein may be fused to the N-terminus, the C-terminus or both termini of
XX  albumin via a linker. The albumin component of the fusion proteins
XX  prolongs the shelf-life and the in vitro and vivo biological activity of
XX  the proteins compared with those of the corresponding therapeutic
XX  proteins on their own. The invention also relates to nucleic acids
XX  encoding albumin fusion proteins, vectors and host cells comprising an
XX  albumin fusion protein nucleic acid, compositions and kits comprising an
XX  albumin fusion protein, the method of extending the shelf-life of a
XX  therapeutic protein by fusion with albumin, and the treatment of disease
XX  using an albumin fusion protein. The albumin fusion proteins may be used
XX  in the treatment of metabolic/endocrine disorders, diabetes and diabetes-
XX  related conditions. Specifically the albumin fusion proteins may be used
XX  to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders
XX  (especially neuropathy), retinopathy, cardiovascular disorders
XX  (especially heart disease, renal disorders and obesity. The proteins may
XX  also be used in a method of maintaining a basal glucose level in a
XX  patient and in a method for losing weight. The present sequence is
XX  related to the invention.
XX
XX  Sequence 730 AA;
XX
XX  Query Match 96.5%; Score 3444; DB 7; Length 730;
XX  Best Local Similarity 97.8%; Pred. No. 1,4e-282;
XX  Matches 652; Conservative 4; Mismatches 11; Indels 0; Gaps 0;

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QY  188 NECFLOHKKDNDPNIPLRVLVPEVDVWCTAFHNDIEFTLKKYLYEYIARRHPYFAPBLFPA 247
QY  244 NECFLOHKKDNDPNIPLRVLVPEVDVWCTAFHNDIEFTLKKYLYEYIARRHPYFAPBLFPA 303
QY  248 KRYKAAPFTECCOAAADKAKCLPKDELDEDEGASAKORLKCASIQKFGERRAFKMAVAAR 307
QY  304 KRYKAAPFTECCOAAADKAKCLPKDELDEDEGASAKORLKCASIQKFGERRAFKMAVAAR 363
QY  308 ISORPPKAEFAEVSRLVTDLTFVHTTECGHDLLFECADRADLAKYICENODSISSEKLEK 367
QY  364 ISORPPKAEFAEVSRLVTDLTFVHTTECGHDLLFECADRADLAKYICENODSISSEKLEK 423
QY  368 CEKPLLEKSHCIAEVENDEMPADLPSLAADFEVESHQVCKNYEAADVFLGMEFLYEYARRH 427
QY  424 CEKPLLEKSHCIAEVENDEMPADLPSLAADFEVESHQVCKNYEAADVFLGMEFLYEYARRH 483
QY  428 PDYSVLLLRLLAKYETTLERKCCAAADDECYAKFDEPKPLVEERONLIIKONCELFPQL 487
QY  484 PDYSVLLLRLLAKYETTLERKCCAAADDECYAKFDEPKPLVEERONLIIKONCELFPQL 543
QY  488 GEYKFNALLVRYTKKVPQVSTPTLVEVSRMLGKVGSKCKKHPKARMPCAEDYLSVLAN 547
QY  544 GEYKFNALLVRYTKKVPQVSTPTLVEVSRMLGKVGSKCKKHPKARMPCAEDYLSVLAN 603
QY  548 QLCVLHEKTPVSDRVTKCCCTESLVNRRPFCPSALVYDEYVYKRENAEFTTFPHADICTISE 607
QY  604 QLCVLHEKTPVSDRVTKCCCTESLVNRRPFCPSALVYDEYVYKRENAEFTTFPHADICTISE 663
QY  608 KERQIKKQTAALVELVGHKPKATKQOLKAVMDPFAFVFKCCADDKKETFPAEEGKGLVAA 667
QY  664 KERQIKKQTAALVELVGHKPKATKQOLKAVMDPFAFVFKCCADDKKETFPAEEGKGLVAA 723
QY  668 SQALAGL 674
QY  724 SQALAGL 730
DB  RESULT 9
DB  ADP16150 strand; protein; 669 AA.
DB  ADF16150;
DB  12-FEB-2004 (first entry)
DB  Human albumin therapeutic fusion protein SegID1237.
DB  albumin fusion protein; albumin activity; human serum albumin;
DB  serum osmotic pressure; shelf-life; stability; antidiabetic;
DB  gene therapy; diabetes mellitus; human.
DB  Chimeric.
DB  Homo sapiens.
DB  WO2003060071-A2.
DB  24-JUL-2003.
DB  23-DEC-2002; 2002WO-US040891.
DB  21-DEC-2001; 2001US-0341811P.
DB  24-JAN-2002; 2002US-0350358P.
DB  28-JAN-2002; 2002US-0351360P.
DB  26-FEB-2002; 2002US-0359370P.
DB  28-FEB-2002; 2002US-0360000P.
DB  27-MAR-2002; 2002US-0367500P.
DB  08-APR-2002; 2002US-0370227P.
DB  10-MAY-2002; 2002US-0378950P.
DB  24-MAY-2002; 2002US-0382617P.
DB  28-MAY-2002; 2002US-0383123P.
DB  05-JUN-2002; 2002US-0385708P.
DB  10-JUL-2002; 2002US-0394625P.

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PS Disclosure; SEQ ID NO 425; 1086bp; English.

CC The invention relates to fusion proteins comprising human serum albumin (AHR21530) and a therapeutic polypeptide such as a therapeutic protein, antibody or peptide or their variants or fragments. The therapeutic protein may be fused to the N-terminus, the C-terminus or both termini of albumin via a linker. The albumin component of the fusion proteins prolongs the shelf-life and the in vitro and vivo biological activity of the proteins compared with those of the corresponding therapeutic proteins on their own. The invention also relates to nucleic acids encoding albumin fusion proteins, vectors and host cells comprising an albumin fusion protein nucleic acid, compositions and kits comprising an albumin fusion protein, the method of extending the shelf-life of a therapeutic protein by fusion with albumin, and the treatment of disease using an albumin fusion protein. The albumin fusion proteins may be used in the treatment of metabolic/endocrine disorders, diabetes and diabetes-related conditions. Specifically the albumin fusion proteins may be used to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders (especially neuropathy), retinopathy, cardiovascular disorders (especially heart disease, renal disorders and obesity. The proteins may also be used in a method of maintaining a basal glucose level in a patient and in a method for losing weight. The present sequence is related to the invention.

CC Sequence 669 AA;

XX

Query Match 96.4%; Score 3438.5; DB 7; Length 669;

Best Local Similarity 97.2%; Pred. No. 3.5e-282;

Matches 653; Conservative 4; Mismatches 6; Indels 9; Gaps 1;

QY 3 IFYIFLLSPVQGLHHTRRGSLDKRGGTFTSDVSSYSLGQAQKFIAMLVKRGHE 62

Db 7 ISLFLFSSAYSR-----SLDKRHGGTFTSDVSSYSLGQAQKFIAMLVKRGHAE 57

QY 63 GFTTSVSSYSLGQAQKFIAMLVKRGDANKSVARRPDIQGENKALVILAFAYLQO 122

Db 58 GFTTSVSSYSLGQAQKFIAMLVKRGDANKSVARRPDIQGENKALVILAFAYLQO 117

QY 123 CPPEHDVAVNEVTEPAKTCVADESANECDSLHTLFGDKLCTVATLRRTYGMADCCAK 182

Db 118 CPPEHDVAVNEVTEPAKTCVADESANECDSLHTLFGDKLCTVATLRRTYGMADCCAK 177

QY 183 QBBERNECFLOHKDDNPMLPRVLRPEVDVWCTAFHNDERTFLKRYLYEIAARRHPYVABE 242

Db 178 QBBERNECFLOHKDDNPMLPRVLRPEVDVWCTAFHNDERTFLKRYLYEIAARRHPYVABE 237

QY 243 LFPARAYKAAFPFEGCOAADKAAKCLPKDELDRBEKASAKRKLCASTQKRGERRAFPA 302

Db 238 LFPARAYKAAFPFEGCOAADKAAKCLPKDELDRBEKASAKRKLCASTQKRGERRAFPA 297

QY 303 WAVARLSORFPAKAFPAVSKLVTDLTKVHTBECGHDLLBEGADDRADLAKYICENODSIS 362

Db 298 WAVARLSORFPAKAFPAVSKLVTDLTKVHTBECGHDLLBEGADDRADLAKYICENODSIS 357

QY 363 KLECCCEKPLEKSHCIABVENDMPADLPSLAADPVESSKDVCKNYAERADVEFGMPLYE 422

Db 358 KLECCCEKPLEKSHCIABVENDMPADLPSLAADPVESSKDVCKNYAERADVEFGMPLYE 417

QY 423 YARRHPDYSVVTLLRLAKTYETTLKCCAAADHPCEYAKVDFEYKRVLVEPQMLIKQNER 482

Db 418 YARRHPDYSVVTLLRLAKTYETTLKCCAAADHPCEYAKVDFEYKRVLVEPQMLIKQNER 477

QY 483 LPEOLGGEYKFNALLVRYTKKVPQVSTPTLVEYSRMLGKVGSKCCGHPKAKRMPGCAEDYL 542

Db 478 LPEOLGGEYKFNALLVRYTKKVPQVSTPTLVEYSRMLGKVGSKCCGHPKAKRMPGCAEDYL 537

QY 543 SVVLNQLCVLHEKTPVSDRVTAKCCTESLVNRRPCCFSALEBVDLTYVKEFNAETFTFHADI 602

Db 538 SVVLNQLCVLHEKTPVSDRVTAKCCTESLVNRRPCCFSALEBVDLTYVKEFNAETFTFHADI 597

QY 603 CILSEKERQIKKQFALVELVYKHKPKATKQOLKAVMDPAAFVCKCKADDKETCFABEKG 662

Db 598 CILSEKERQIKKQFALVELVYKHKPKATKQOLKAVMDPAAFVCKCKADDKETCFABEKG 657

QY 663 KUVAASQAALGL 674

Db 658 KUVAASQAALGL 659

RESULT 11

ID ADF16527

ADFL6527 standard; protein; 730 AA.

AC ADF16527;

XX

DI 12-FEB-2004 (first entry)

XX

DE Human albumin therapeutic fusion protein SeqID1624.

XX

KW albumin fusion protein; albumin activity; human serum albumin;

KW serum osmotic pressure; shelf-life; stability; antidiabetic;

KW gene therapy; diabetes mellitus; human.

XX

OS Chimeric.

OS Homo sapiens.

XX

PN MO2003060071-A2.

XX

PD 24-JUL-2003.

XX

PF 23-DEC-2002; 2002WO-US040891.

XX

PR 21-DEC-2001; 2001US-0341811P.

PR 24-JAN-2002; 2002US-0350358P.

PR 28-JAN-2002; 2002US-0351360P.

PR 26-FEB-2002; 2002US-0359370P.

PR 28-FEB-2002; 2002US-0360000P.

PR 27-MAR-2002; 2002US-0367500P.

PR 08-APR-2002; 2002US-0370227P.

PR 10-MAY-2002; 2002US-0378950P.

PR 24-MAY-2002; 2002US-0382617P.

PR 28-MAY-2002; 2002US-0383123P.

PR 05-JUN-2002; 2002US-0385708P.

PR 10-JUL-2002; 2002US-0394625P.

PR 24-JUL-2002; 2002US-0398008P.

PR 09-AUG-2002; 2002US-0402131P.

PR 13-AUG-2002; 2002US-0402708P.

PR 18-SEP-2002; 2002US-0411355P.

PR 18-SEP-2002; 2002US-0411426P.

PR 02-OCT-2002; 2002US-0414984P.

PR 11-OCT-2002; 2002US-0417611P.

PR 23-OCT-2002; 2002US-0420246P.

PR 05-NOV-2002; 2002US-0423623P.

XX

PA (HUMA-) HUMAN GENOME SCI INC.

PA (DELT-) DELTA BIOTECHNOLOGY LTD.

PA (PRIN-) PRINCIPAL PHARM CORP.

XX

PI Ballance DJ, Turner AJ, Rosen CA, Haseltine WA;

XX

DR WPI; 2003-598517/56.

XX

PT New albumin fusion protein, useful for preparing a composition for

PT treating diabetes mellitus.

XX

PS Example 4; SEQ ID NO 1624; 24pp; English.

XX

CC This invention relates to a novel albumin fusion protein having albumin

CC or biological activity. Human serum albumin is responsible for a

CC significant proportion of the osmotic pressure of serum and also

CC functions as a carrier of endogenous and exogenous ligands. The fusion of

CC albumin to a therapeutic protein may increase shelf-life and stability of

CC the therapeutic protein. The albumin fusion protein of the invention may

CC allow production of compositions with antidiabetic activity whilst the

CC nucleotide sequence which encodes it may be useful for gene therapy. The

CC albumin fusion protein is useful for preparing a composition for treating

Db	64	LFINNTIASIAAKEBGSVSLDKRHGEGTFTSDVSSYLEGQAARFEIAMLVYKGRHAGSTPMS	123
Qy	68	DVSSYLEGQAARFEIAMLVYKGRDAHKSSEVAHREKDLGEEENFKALVLIARFAQYLOQCFRFD	127
Db	124	DVSSYLEGQAARFEIAMLVYKGRDAHKSSEVAHREKDLGEEENFKALVLIARFAQYLOQCFRFD	183
Qy	128	HVKLVNEVTEPFAKTCVADESAENCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKPEPR	187
Db	184	HVKLVNEVTEPFAKTCVADESAENCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKPEPR	243
Qy	188	NBCFLLQHKDNDPNLPRVLRPEVDMVWCTAAPHNDNEFTLKKYLYEIAARRHPPYAPBELLFPA	247
Db	244	NBCFLLQHKDNDPNLPRVLRPEVDMVWCTAAPHNDNEFTLKKYLYEIAARRHPPYAPBELLFPA	303
Qy	248	KRYKAARTECCQADRAKACLLPKLDELDRDEGKASAKORLKASLQKFGERRAKAWAR	307
Db	304	KRYKAARTECCQADRAKACLLPKLDELDRDEGKASAKORLKASLQKFGERRAKAWAR	363
Qy	308	LSGRPFKAERFAEVSKLVTDLTKVHTCECHGDLLCEADDPADIAKXYICENQDSSISKLKEC	423
Db	364	LSGRPFKAERFAEVSKLVTDLTKVHTCECHGDLLCEADDPADIAKXYICENQDSSISKLKEC	423
Qy	368	CEKPLLEKSHCTAEVNDENPADLPSLADPVESSKDVCKRYAARAVPLGMPLYEYARRH	427
Db	424	CEKPLLEKSHCTAEVNDENPADLPSLADPVESSKDVCKRYAARAVPLGMPLYEYARRH	483
Qy	428	PDYSVLLLRFLAKTYETTLTEKCCCAADPHRYCAKVEDEFPLVEEPQNLIKONCELFEGQ	487
Db	484	PDYSVLLLRFLAKTYETTLTEKCCCAADPHRYCAKVEDEFPLVEEPQNLIKONCELFEGQ	543
Qy	488	GEYKFNQALLVRYTKVPOVSTPTLVESRNLGRVSKKCCBBAKMPQAEYLSVIAN	547
Db	544	GEYKFNQALLVRYTKVPOVSTPTLVESRNLGRVSKKCCBBAKMPQAEYLSVIAN	603
Qy	548	QLCVLHEKTPVSRVTKCCSTESLVMRRPCGSALAEVDETVYKPKEMAEFTPHADICTLSEB	607
Db	604	QLCVLHEKTPVSRVTKCCSTESLVMRRPCGSALAEVDETVYKPKEMAEFTPHADICTLSEB	663
Qy	608	KERQIKKQATALVELVGHKPKATEQOLKAVWDDPAFAVEKCKKADDKETGFAERKGLVAA	667
Db	664	KERQIKKQATALVELVGHKPKATEQOLKAVWDDPAFAVEKCKKADDKETGFAERKGLVAA	723
Qy	668	SOAALGL 674	
Db	724	SOAALGL 730	
RESULT 13			
ADFL6149			
ID	ADFL6149	standard; protein; 669 AA.	
XX			
AC	ADFL6149;		
XX			
DT	12-FEB-2004	(first entry)	
XX			
DE		Human albumin therapeutic fusion protein SegID1236.	
XX			
KW		albumin fusion proteain; albumin activity; human serum albumin;	
KW		serum osmotic pressure; shelf-life; stability; antidiabetic;	
KW		gene therapy; diabetes mellitus; human.	
XX			
OS		Chimeric.	
OS		Homo sapiens.	
XX			
PN		MO2003060071-A2.	
XX			
PD		24-JUL-2003.	
XX			
PF		23-DEC-2002; 2002WC-US040891.	
XX			
PR		21-DEC-2001; 2001US-034181IP.	
PR		24-JAN-2002; 2002US-0350358P.	
PR		28-JAN-2002; 2002US-0351360P.	

PR	26-FEB-2002;	2002US-0359370P.
PR	28-FEB-2002;	2002US-0360000P.
PR	27-MAR-2002;	2002US-0367500P.
PR	08-APR-2002;	2002US-0370227P.
PR	10-MAY-2002;	2002US-0378950P.
PR	24-MAY-2002;	2002US-0386317P.
PR	28-MAY-2002;	2002US-0383123P.
PR	05-JUN-2002;	2002US-0385708P.
PR	10-JUL-2002;	2002US-0394625P.
PR	24-JUL-2002;	2002US-0398008P.
PR	09-AUG-2002;	2002US-0402131P.
PR	13-AUG-2002;	2002US-0402708P.
PR	18-SEP-2002;	2002US-0411355P.
PR	18-SEP-2002;	2002US-0411426P.
PR	02-OCT-2002;	2002US-0419484P.
PR	11-OCT-2002;	2002US-0417611P.
PR	23-OCT-2002;	2002US-0420246P.
PR	05-NOV-2002;	2002US-0423623P.
XX		
PA	(HUMA-) HUMAN GENOME SCI INC.	
PA	(DELZ) DELTA BIOTECHNOLOGY LTD.	
PA	(PRIN-) PRINCIPAL PHARM CORP.	
XX		
PI	Ballance DJ, Turner AJ, Rosen CA, Haseltine WA;	
DR	WPI; 2003-598517/56.	
XX		
PT	New albumin fusion protein, useful for preparing a composition for	
PT	treating diabetes mellitus.	
XX		
PS	Example 4; SEQ ID NO 1236; 24pp; English.	
XX		
CC	This invention relates to a novel albumin fusion protein having albumin	
CC	or biological activity. Human serum albumin is responsible for a	
CC	significant proportion of the osmotic pressure of serum and also	
CC	functions as a carrier of endogenous and exogenous ligands. The fusion of	
CC	albumin to a therapeutic protein may increase shelf-life and stability of	
CC	the therapeutic protein. The albumin fusion protein of the invention may	
CC	allow production of compositions with antidiabetic activity whilst the	
CC	nucleotide sequence which encodes it may be useful for gene therapy. The	
CC	albumin fusion protein is useful for preparing a composition for treating	
CC	diabetes mellitus. The present sequence is the amino acid sequence of a	
CC	novel full-length human albumin therapeutic fusion protein of the	
CC	invention. Note: The sequence data for this patent did not form part of	
CC	the printed specification, but was obtained in electronic format directly	
CC	from WIPO at ftp.wipo.int/pub/publisshedpct_sequences	
XX		
SO	Sequence 669 AA;	
Query Match	96.2%; Score 3432.5; DB 7; Length 669;	
Best Local Similarity	97.0%; Pred. No. 1.1e-281;	
Matches 652; Conservative	4; Mismatches 7; Indels 9; Gaps 1;	
Qy	3	IYIYFLPLISFYQGJLHNRHRSGLDKRHGEGFTSDVSSYLEGQAARFEIAMLVYKGRHE 62
Db	7	ISLFLFPSSAYSR-----SLDKRHHAGFTISDVSSYLEGQAARFEIAMLVYKGRHAE 57
Qy	63	GFTSDVSSYLEGQAARFEIAMLVYKGRDAHKSSEVAHREKDLGEEENFKALVLIARFAQYLOQ 122
Db	58	GFTSDVSSYLEGQAARFEIAMLVYKGRDAHKSSEVAHREKDLGEEENFKALVLIARFAQYLOQ 117
Qy	123	CFPFDHVKLVNEVTEPFAKTCVADESAENCDKSLHTLFGDKLCTVAATLRETYGEMADCCAK 182
Db	118	CFPFDHVKLVNEVTEPFAKTCVADESAENCDKSLHTLFGDKLCTVAATLRETYGEMADCCAK 177
Qy	183	QEPRENECTLQHKDNDPNLPRVLRPEVDMVWCTAAPHNDNEFTLKKYLYEIAARRHPPYAPB 242
Db	178	QEPRENECTLQHKDNDPNLPRVLRPEVDMVWCTAAPHNDNEFTLKKYLYEIAARRHPPYAPB 237
Qy	243	LIFPAKRYKAARTECCQADRAKACLLPKLDELDRDEGKASAKORLKASLQKFGERRAKA 302
Db	238	LIFPAKRYKAARTECCQADRAKACLLPKLDELDRDEGKASAKORLKASLQKFGERRAFKA 297

QY 303 WAVARLSORPPKAEFAVSVKLVTDLTKVHTTECHGDLLECADDRADLAKYICENODSIS 362
 DB 298 WAVARLSORPPKAEFAVSVKLVTDLTKVHTTECHGDLLECADDRADLAKYICENODSIS 357
 QY 363 KKECCCKPLLEKSHCIABVENDEMPADLPSLAADPVESKDCVKNYAARADVFLGMFLYE 422
 DB 358 KKECCCKPLLEKSHCIABVENDEMPADLPSLAADPVESKDCVKNYAARADVFLGMFLYE 417
 QY 423 YARRHPDYSVVLILRLAKTYETTLLEKCCAAADPHCEYAKVDFEPRKLVESRPNLTKONCE 482
 DB 418 YARRHPDYSVVLILRLAKTYETTLLEKCCAAADPHCEYAKVDFEPRKLVESRPNLTKONCE 477
 QY 483 LFEQLGSEYKRONALVRYTKKVPQVSTPTLVEVSRMLGKVGSKCCGHPBAKMPCAEDYL 542
 DB 478 LFEQLGSEYKRONALVRYTKKVPQVSTPTLVEVSRMLGKVGSKCCGHPBAKMPCAEDYL 537
 QY 543 SVVLANQLCVLHEKTPVSDRVTKCCTESLVNRRPCFSALEVDYETVYKGFNAETFTPHADI 602
 DB 538 SVVLANQLCVLHEKTPVSDRVTKCCTESLVNRRPCFSALEVDYETVYKGFNAETFTPHADI 597
 QY 603 CTLSSEKEROIKKQPTALVELVKNHPKATKEQLKAVMDPFAAFVBEKCKADDKETCFABEKG 662
 DB 598 CTLSSEKEROIKKQPTALVELVKNHPKATKEQLKAVMDPFAAFVBEKCKADDKETCFABEKG 657
 QY 663 KLVAAASQAAALGL 674
 DB 658 KLVAAASQAAALGL 669
 RESULT 14
 ADF16148 standard; protein; 669 AA.
 ADF16148;
 ADF16148;
 12-FEB-2004 (first entry)
 Human albumin therapeutic fusion protein Segid1215.
 albumin fusion protein; albumin activity; human serum albumin;
 serum osmotic pressure; shelf-life; stability; antidiabetic;
 gene therapy; diabetes mellitus; human.
 Chimeric.
 Homo sapiens.
 MO2003060071-A2.
 24-JUL-2003.
 23-DEC-2002; 2002WC-US040891.
 21-DEC-2001; 2001US-0341811P.
 24-JAN-2002; 2002US-0350358P.
 28-JAN-2002; 2002US-0351136P.
 28-FEB-2002; 2002US-0359370P.
 28-FEB-2002; 2002US-0360000P.
 27-MAR-2002; 2002US-0367500P.
 08-APR-2002; 2002US-0370227P.
 10-MAY-2002; 2002US-0378950P.
 24-MAY-2002; 2002US-0382617P.
 28-MAY-2002; 2002US-0383123P.
 05-JUN-2002; 2002US-0385708P.
 10-JUL-2002; 2002US-0394625P.
 24-JUL-2002; 2002US-0398008P.
 09-AUG-2002; 2002US-0402131P.
 13-AUG-2002; 2002US-0402758P.
 18-SEP-2002; 2002US-0411355P.
 18-SEP-2002; 2002US-0411426P.
 02-OCT-2002; 2002US-0414984P.
 11-OCT-2002; 2002US-0417611P.
 23-OCT-2002; 2002US-0420246P.
 05-NOV-2002; 2002US-0423623P.

XX (HUMA-) HUMAN GENOME SCI INC.
 PA (DELZ) DELTA BIOTECHNOLOGY LTD.
 PA (PRIN-) PRINCIPAL PHARM CORP.
 XX PI Ballance DJ, Turner AJ, Rosen CA, Haseltine WA;
 XX WPI; 2003-598517/56.
 PT New albumin fusion protein, useful for preparing a composition for
 PT creating diabetes mellitus.
 XX
 XX Example 4; SEQ ID NO 1235; 24pp; English.
 CC This invention relates to a novel albumin fusion protein having albumin
 CC or biological activity. Human serum albumin is responsible for a
 CC significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion of
 CC albumin to a therapeutic protein may increase shelf-life and stability of
 CC the therapeutic protein. The albumin fusion protein of the invention may
 CC allow production of compositions with antidiabetic activity whilst the
 CC nucleotide sequence which encodes it may be useful for gene therapy. The
 CC albumin fusion protein is useful for preparing a composition for treating
 CC diabetes mellitus. The present sequence is the amino acid sequence of a
 CC novel full-length human albumin therapeutic fusion protein of the
 CC invention. Note: The sequence data for this patent did not form part of
 CC the printed specification, but was obtained in electronic format directly
 CC from WIPD at ftp.wipo.int/pub/publishedpct_sequences
 CC
 XX Sequence 669 AA;
 XX
 Query Match 96.2%; Score 3432.5; DB 7; Length 669;
 Best Local Similarity 97.0%; Pred No. 11e-281;
 Matches 652; Conservative 4; Mismatches 7; Indels 9; Gaps 1;
 3 IPYIFLFLISFVQGLHHTRRGSLDKRNGEGFTSDVSSYLRGQAAKEFIAMLVKGRHGE 62
 7 ISLFLFSSAYSR-----SLDKRHSRGGFTSDVSSYLRGQAAKEFIAMLVKGRHAE 57
 63 GPFPTSVSSYLRGQAAKEFIAMLVKGRDANKSEVNAHFPDLDSENNKALVLAFAQYIQ 122
 58 GFPTSVSSYLRGQAAKEFIAMLVKGRDANKSEVNAHFPDLDSENNKALVLAFAQYIQ 117
 123 CPPEHDVKLVNEVTEBAKTCVADSEANCKDSLHTLFGDKLCTVATLRTTYGEMADCCAK 182
 118 CPPEHDVKLVNEVTEBAKTCVADSEANCKDSLHTLFGDKLCTVATLRTTYGEMADCCAK 177
 183 QEBERNCEFLQHKDNDPNI.PRLVREVDVWCTAFHNDNEBTFPKKYLYIARRHPYFAYE 242
 178 QEBERNCEFLQHKDNDPNI.PRLVREVDVWCTAFHNDNEBTFPKKYLYIARRHPYFAYE 237
 243 LFFPARKYQAAPTECCOAAADKAACLIPKLDLDRDEKASASAKORLKCASIQKRGEEAFPA 302
 238 LFFPARKYQAAPTECCOAAADKAACLIPKLDLDRDEKASASAKORLKCASIQKRGEEAFPA 297
 303 WAVARLSORPPKAEFAVSVKLVTDLTKVHTTECHGDLLECADDRADLAKYICENODSIS 362
 298 WAVARLSORPPKAEFAVSVKLVTDLTKVHTTECHGDLLECADDRADLAKYICENODSIS 357
 363 KKECCCKPLLEKSHCIABVENDEMPADLPSLAADPVESKDCVKNYAARADVFLGMFLYE 422
 358 KKECCCKPLLEKSHCIABVENDEMPADLPSLAADPVESKDCVKNYAARADVFLGMFLYE 417
 423 YARRHPDYSVVLILRLAKTYETTLLEKCCAAADPHCEYAKVDFEPRKLVESRPNLTKONCE 482
 418 YARRHPDYSVVLILRLAKTYETTLLEKCCAAADPHCEYAKVDFEPRKLVESRPNLTKONCE 477
 483 LFEQLGSEYKRONALVRYTKKVPQVSTPTLVEVSRMLGKVGSKCCGHPBAKMPCAEDYL 542
 478 LFEQLGSEYKRONALVRYTKKVPQVSTPTLVEVSRMLGKVGSKCCGHPBAKMPCAEDYL 537
 543 SVVLANQLCVLHEKTPVSDRVTKCCTESLVNRRPCFSALEVDYETVYKGFNAETFTPHADI 602

Db 538 SVVNLQLCVHHEKTPVSDRYTKCSHESLVNRRPCCSALSEVDSTYVYKPEFNAETFFPHADI 597
 Qy 603 CTLSEKERQIKKQTLVAVLVKPKPKATKEQLKAVVMDFAAFVEKCCCKADDKETCPAEBEGK 662
 Db 598 CTLSEKERQIKKQTLVAVLVKPKPKATKEQLKAVVMDFAAFVEKCCCKADDKETCPAEBEGK 657
 Qy 663 KLVAAASQAALGL 674
 Db 658 KLVAAASQAALGL 669

RESULT 15

ADP16145
 ID ADP16145 standard; protein; 669 AA.

AC ADP16145;

DE 12-FEB-2004 (first entry)

Human albumin therapeutic fusion protein SegID1232.

KW albumin fusion protein; albumin activity; human serum albumin;
 KW serum osmotic pressure; shelf-life; stability; antidiabetic;
 KW gene therapy; diabetes mellitus; human.

OS Chimeric.
 OS Homo sapiens.

PN MO2003060071-A2.

XX 24-UTL-2003.

XX 23-DEC-2002; 2002WC-US040891.

XX 21-DEC-2001; 2001US-0341811P.

XX 24-JAN-2002; 2002US-0350358P.

XX 28-JAN-2002; 2002US-0351360P.

XX 26-FEB-2002; 2002US-0359370P.

XX 28-FEB-2002; 2002US-0360000P.

XX 27-MAR-2002; 2002US-0367527P.

XX 08-APR-2002; 2002US-0370227P.

XX 10-MAY-2002; 2002US-0378950P.

XX 24-MAY-2002; 2002US-0382617P.

XX 28-MAY-2002; 2002US-0383123P.

XX 05-JUN-2002; 2002US-0385708P.

XX 10-JUL-2002; 2002US-0394625P.

XX 24-UTL-2002; 2002US-0398008P.

XX 09-AUG-2002; 2002US-0402131P.

XX 13-AUG-2002; 2002US-0402708P.

XX 18-SEP-2002; 2002US-0411355P.

XX 18-SEP-2002; 2002US-0411426P.

XX 02-OCT-2002; 2002US-0414984P.

XX 11-OCT-2002; 2002US-0417511P.

XX 23-OCT-2002; 2002US-0420246P.

XX 05-NOV-2002; 2002US-0423623P.

PA (HUMA-) HUMAN GENOME SCI INC.
 PA (DELZ) DELTA BIOTECHNOLOGY LTD.
 PA (PRIN-) PRINCIPAL PHARM CORP.

PI Balance DJ, Turner AJ, Rosen CA, Haseltine WA;
 WIPI; 2003-598517/56.

PT New albumin fusion protein, useful for preparing a composition for
 treating diabetes mellitus.

PS Example 4; SEQ ID NO 1232; 24pp; English.

CC This invention relates to a novel albumin fusion protein having albumin
 CC or biological activity. Human serum albumin is responsible for a
 CC significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion of

CC albumin to a therapeutic protein may increase shelf-life and stability of
 CC the therapeutic protein. The albumin fusion protein of the invention may
 CC allow production of compositions with antidiabetic activity whilst the
 CC nucleotide sequence which encodes it may be useful for gene therapy. The
 CC albumin fusion protein is useful for preparing a composition for treating
 CC diabetes mellitus. The present sequence is the amino acid sequence of a
 CC novel full-length human albumin therapeutic fusion protein of the
 CC invention. Note: The sequence data for this patent did not form part of
 CC the printed specification, but was obtained in electronic format directly
 CC from WIPO at ftp.wipo.int/pub/publishspect_sequences

Qy Sequence 669 AA;

Query Match 96.2%; Score 3432.5; DB 7; Length 669;
 Best Local Similarity 97.0%; Pred. No. 1.1e-281;

Matches 652; Conservative 4; Mismatches 7; Indels 9; Gaps 1;

3 IYIIFLPLISFYQGIHHTHRREGSLDKRRGEGFTSDVSSYLEGQAKKEFIAMLVKGRHGE 62

7 ISLFLFSSAYSR-----SLDKRHAEGFTSDVSSYLEGQAKKEFIAMLVKGRHAE 57

63 GFTSDVSSYLEGQAKKEFIAMLVKGRDANKSEVAHRFPKDLGEEHFKALVLTAFAYLQQ 122

58 GFTSDVSSYLEGQAKKEFIAMLVKGRDAHSEVAHRFPKDLGEEHFKALVLTAFAYLQQ 117

123 CPPEDHVKLVNEVTEPAKTCVADSEANCDKSLHTLFGDKLCTVAITARTYGEVMAADCCAK 182

118 CPPEDHVKLVNEVTEPAKTCVADSEANCDKSLHTLFGDKLCTVAITARTYGEVMAADCCAK 177

183 QPERRNECFLOHKDNPMLPRLVREPVDMCTAFADNNEFTPKKLYLETARSHRPFYAPE 242

178 QPERRNECFLOHKDNPMLPRLVREPVDMCTAFADNNEFTPKKLYLETARSHRPFYAPE 237

243 ILFPKRYKAATTECCQADAKAACLPLKLDLRDSEGKASAKQRLKASLQFGERRAFKA 302

238 ILFPKRYKAATTECCQADAKAACLPLKLDLRDSEGKASAKQRLKASLQFGERRAFKA 297

303 WAAVARIQSRRPFAEVAEVSKLVTDLTKVHTTECHDGLLECDADRDADLAKYICENDDSISS 357

298 WAAVARIQSRRPFAEVAEVSKLVTDLTKVHTTECHDGLLECDADRDADLAKYICENDDSISS 352

363 KIKKCCERPLIEKSHCIAEVENDEMPADLPSLAADPVESKDVCKRYAEAKDVFGLMPFYE 422

358 KIKKCCERPLIEKSHCIAEVENDEMPADLPSLAADPVESKDVCKRYAEAKDVFGLMPFYE 417

423 YARRHPDYSVVLVLLAKTYETTLLEKCCAAADPHBCYAKVPDFPVLVEEPPQNLTKONCE 482

418 YARRHPDYSVVLVLLAKTYETTLLEKCCAAADPHBCYAKVPDFPVLVEEPPQNLTKONCE 477

483 LFEQLGEEKYFQNALLVRYTKVVPQVSTPTLVESVNLGKVGSKCKHPBAKMPCAEDYL 542

478 LFEQLGEEKYFQNALLVRYTKVVPQVSTPTLVESVNLGKVGSKCKHPBAKMPCAEDYL 537

543 SVVNLQLCVHHEKTPVSDRYTKCSHESLVNRRPCCSALSEVDSTYVYKPEFNAETFFPHADI 602

538 SVVNLQLCVHHEKTPVSDRYTKCSHESLVNRRPCCSALSEVDSTYVYKPEFNAETFFPHADI 597

603 CTLSEKERQIKKQTLVAVLVKPKPKATKEQLKAVVMDFAAFVEKCCCKADDKETCPAEBEGK 662

598 CTLSEKERQIKKQTLVAVLVKPKPKATKEQLKAVVMDFAAFVEKCCCKADDKETCPAEBEGK 657

Qy 663 KLVAAASQAALGL 674

Db 658 KLVAAASQAALGL 669

Search completed: April 19, 2006, 12:02:31

Job time : 162.884 secs

GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 19, 2006, 12:02:52 ; Search time 30.6364 Seconds
 (without alignments)
 2116.769 Million cell updates/sec

Title: US-10-775-180-447
 Perfect score: 3568
 Sequence: 1 MNIFFYIFLFLSPVQGLEHT.....TCPABRGKLVAAASQALGL 674

Scoring table: BLOSUM62
 Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
 Maximum DB seq length: 200000000

Post-Processing: Minimum Match 0%
 Maximum Match 100%

Listing first 45 summaries

Database : PIR 80:***
 1: PIR1:***
 2: PIR2:***
 3: PIR3:***
 4: PIR4:***

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3108	87.1	609	1 ABHUS	serum albumin prec
2	2947	82.6	600	2 A47391	serum albumin prec
3	2627	73.6	608	2 S57632	serum albumin prec
4	2481.5	69.5	607	1 ABHOS	serum albumin prec
5	2451.5	68.7	607	1 ABHOS	serum albumin prec
6	2437.5	68.3	607	1 ABSHS	serum albumin prec
7	2431	68.1	608	1 ABRTS	serum albumin prec
8	2416.5	67.7	605	1 ABPGS	serum albumin prec
9	2387.5	66.9	609	2 JCS838	albumin - Mongolia
10	1861	52.2	453	2 A05139	serum albumin prec
11	1562	43.8	615	1 ABCBS	serum albumin prec
12	1260.5	35.3	609	2 UC4298	alpha-fetoprotein
13	1256.5	35.2	609	1 PPHU	alpha-fetoprotein
14	1249.5	35.0	609	1 PPHU	alpha-fetoprotein
15	1207.5	33.8	607	1 PPHU	alpha-fetoprotein
16	1181.5	33.1	265	1 ABXL72	74k albumin precur
17	1175.5	32.9	608	2 I46986	albumin - dog (fra
18	1084	30.4	605	1 ABX468	68k serum albumin
19	1067	29.9	611	1 FPMW	alpha-fetoprotein
20	1055	29.6	599	1 PPRP	alpha-fetoprotein
21	932.5	26.1	608	2 A53195	atamin precursor -
22	930	26.1	614	2 S59517	atamin precursor -
23	751.5	21.1	608	1 ABONS1	serum albumin prec
24	746.5	20.9	608	1 ABONS2	serum albumin 2 pr
25	699	19.6	382	2 A37253	serum albumin - bu
26	440.5	12.3	1423	1 S27941	serum albumin - se
27	401	11.2	474	1 VYHD	vitamin D-binding
28	400	11.2	475	1 VYRD	vitamin D-binding
29	387	10.8	472	1 A35327	vitamin D-binding

30	247.5	6.9	180	1 GCB0	glucagon precursor
31	245.5	6.9	180	2 A57294	glucagon precursor
32	243.5	6.8	180	1 GCHU	glucagon precursor
33	243.5	6.8	180	1 GCRT	glucagon precursor
34	241.5	6.8	180	1 GCHY	glucagon precursor
35	240.5	6.7	180	1 GCGP	glucagon precursor
36	238.5	6.7	158	1 GCPG	glucagon precursor
37	230.5	6.5	180	1 GCRTU	glucagon precursor
38	226.5	6.3	206	2 I51301	proglucagon - chic
39	225.5	6.3	151	1 GCCH	glucagon precursor
40	215.5	6.0	178	2 I51058	glucagon I precurs
41	209	5.9	101	1 GCRGB	glucagon precursor
42	207.5	5.8	178	2 I51057	glucagon II precur
43	200.5	5.6	122	1 GCAP2	glucagon 2 precurs
44	188.5	5.3	63	1 GCTDC	glucagon precursor
45	188	5.3	72	1 GCCKA	glucagon precursor

ALIGNMENTS

RESULT 1

ABHUS serum albumin precursor [validated] - human
 N:Alternate names: preproalbumin
 N:Contains: Kinetensin
 C:Species: Homo sapiens (man)
 C>Date: 29-Jul-1981 #sequence revision 31-Jan-1997 #ext change 09-Jul-2004
 C/Accession: A93743; A93936; I39427; I59286; I59313; G01747; S55314; A91420; S06422; S36
 R;Lawn, R.M.; Adelman, J.; Bock, F.; Franke, A.E.; Houck, C.M.; Najjaran, R.C.; Seebur
 Nucleic Acids Res. 9, 6103-6114, 1981
 A>Title: The sequence of human serum albumin cDNA and its expression in Escherichia coli
 A/Reference number: A93743; MWID:82081882; PMID:6171778
 A/Accession: A93743
 A/Molecule type: mRNA
 A/Residues: 1-419, 'K', 421-609 <LAW>
 A/Cross-references: UNIPROT:P02768; UNIPARC:UPI00002CE3A; EMBL:V00495; GB:J00078; GB:L0
 R;Dugalczyk, A.; Law, S.W.; Demmlison, O.E.
 Proc. Natl. Acad. Sci. U.S.A. 79, 71-75, 1982
 A>Title: Nucleotide sequence and the encoded amino acids of human serum albumin mRNA.
 A/Reference number: A93936; MWID:82105994; PMID:627531
 A/Accession: A93936
 A/Molecule type: mRNA
 A/Residues: 1-120, 'G', 122-609 <DUG>
 A/Cross-references: UNIPARC:UPI0000156B8; EMBL:V00494; NID:G28589; PIDN:CAA23753.1; PIR
 R;Orano, Y.; Watanabe, K.; Sakai, M.; Tamaoki, T.
 J. Biol. Chem. 261, 3244-3251, 1986
 A>Title: The human albumin gene. Characterization of the 5' and 3' flanking regions and
 A/Reference number: I39427; MWID:86140099; PMID:2419329
 A/Accession: I39427
 A/Status: translation not shown
 A/Molecule type: DNA
 A/Residues: 1-26 <URA>
 A/Cross-references: UNIPARC:UPI00002BD5F; GB:M13075; NID:G178330; PIDN:AAA51688.1; PID
 R;Watkins, S.; Madison, J.; Galliano, M.; Minichioiti, L.; Putnam, F.W.
 Proc. Natl. Acad. Sci. U.S.A. 91, 2275-2279, 1994
 A>Title: A nucleotide insertion and frameshift cause analbuminemia in an Italian family
 A/Reference number: I59286; MWID:94181575; PMID:8134387
 A/Accession: I59286
 A/Status: translated from GB/EMBL/DBJ
 A/Molecule type: DNA
 A/Residues: 282-290, 'KSRPDIQ', <MAT>
 A/Cross-references: UNIPARC:UPI000011F7AF; GB:S69192; NID:G546032; PIDN:AA830282.1; PID
 A>Note: this frame-shift variant, designated albumin Roma, leads to analbuminemia
 R;Madison, J.; Galliano, M.; Watkins, S.; Minichioiti, L.; Porta, F.; Rossi, A.; Putnam,
 Proc. Natl. Acad. Sci. U.S.A. 91, 6476-6480, 1994
 A>Title: Genetic variants of human serum albumin in Italy: point mutants and a carboxyl
 A/Reference number: I59313; MWID:94294404; PMID:8022807
 A/Accession: I59313
 A/Status: translated from GB/EMBL/DBJ
 A/Molecule type: DNA
 A/Residues: 589-590, 'ALPFRRVKVVLLLOVKEP', <MAD>
 A/Cross-references: UNIPARC:UPI0000072BC4; GB:S70799; NID:G547231; PIDN:AA831177.1; PID

A>Note: this frame-shift variant is designated albumin Bazzano; four additional variants
 R:Menya, J.; Parrilla, R.; Ayuso, M.S.
 submitted to the EMBL Data Library, March 1995
 A:Reference number: G08292
 A:Accession: G01747
 A:Status: translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-120, 'G', 122-455 <MEN>
 A:Cross-references: UNIPARC:UPI000016A1A8; EMBL:U22961; NID:9763428; PIDN:AAA64922.1; PI
 R:Lederwood, E.C.; George, P.M.; Peach, R.J.; Brennan, S.O.
 Biochem. J. 308, 321-325, 1995
 A:Title: Endoproteolytic processing of recombinant proalbumin variants by the yeast *Kex2*
 A:Reference number: S55314; MWID:95275251; PMID:7755581
 A:Accession: S55314
 A:Molecule type: protein
 A:Residues: 19-27 <LED>
 A:Cross-references: UNIPARC:UPI00001743FA
 R:Meloun, B.; Moravek, L.; Koetka, V.
 FBS Lett. 58, 134-137, 1975
 A:Title: Complete amino acid sequence of human serum albumin.
 A:Reference number: A91420; MWID:76187907; PMID:1225573
 A:Accession: A91420
 A:Molecule type: protein
 A:Residues: 25-117, 'EQ', 120-154, 'Q', 156-193, 'E', 195-387, 'H', 389-390, 'Y', 392-393, 'K', 395-
 A:Cross-references: UNIPARC:UPI00001743FB
 R:Roehr, U.; Spittler, G.; Tripler, D.
 Justus Liebig's Ann. Chem. 9, 881-884, 1988
 A:Title: Isolation and structure elucidation of middle-molecular weight peptides from ur
 A:Reference number: S06422
 A>Note: this paper is in German, with an English abstract
 A:Accession: S06422
 A:Molecule type: protein
 A:Residues: 25-48 <ROE>
 A:Cross-references: UNIPARC:UPI0000052CDA
 R:Finch, J.W.; Crouch, R.K.; Knapp, D.R.; Schey, K.L.
 Arch. Biochem. Biophys. 305, 595-599, 1993
 A:Title: Mass spectrometric identification of modifications to human serum albumin treat
 A:Reference number: S36882; MWID:93384321; PMID:8373198
 A:Accession: S36882
 A:Molecule type: protein
 A:Residues: 45-67, 141-160, 311-337, 469-490, 570-581 <FIN>
 A:Cross-references: UNIPARC:UPI00000423AC; UNIPARC:UPI00001743FC; UNIPARC:UPI00001743FD;
 R:Kaufler, E.; Spittler, G.
 Biol. Chem. Hoppe-Seyler 372, 849-855, 1991
 A:Title: Bruchstuecke aus Albumin und beta(2)-Mikroglobulin - Bestandteile der Mitteilmo
 A:Reference number: S17599; MWID:92126241; PMID:1772598
 A:Accession: S17599
 A:Molecule type: protein
 A:Residues: 25-54; 354-357; 431-447 <KAU>
 A:Cross-references: UNIPARC:UPI0000174400; UNIPARC:UPI0000174401; UNIPARC:UPI0000174402
 A>Note: 49-Leu was also found
 R:Carraway, R.E.; Cochran, D.E.; Boucher, W.; Mitra, S.P.
 J. Immunol. 143, 1680-1684, 1989
 A:Title: Structures of histamine-releasing peptides formed by the action of acid proteas
 A:Reference number: A45800; MWID:89341406; PMID:2474609
 A:Accession: A45800
 A:Molecule type: protein
 A:Residues: 166-173 <CR>
 A:Cross-references: UNIPARC:UPI000004A560
 R:Magard, M.H.; Kobayashi, R.; Chen, C.F.; Lee, T.D.; Reeve Jr., J.R.; Shively, J.E.; Wa
 Biochem. Biophys. Res. Commun. 136, 983-988, 1986
 A:Title: The amino acid sequence of kinetensin, a novel peptide isolated from pepsin-tere
 A:Reference number: A03239; MWID:86242180; PMID:3087352
 A:Accession: A03239
 A:Molecule type: protein
 A:Residues: 166-173, 'L' <MOG>
 A:Cross-references: UNIPARC:UPI00000351D2
 R:Galliano, M.; Minchiotti, L.; Porta, F.; Rossi, A.; Ferrri, G.; Madison, J.; Watkins, S
 Proc. Natl. Acad. Sci. U.S.A. 87, 8721-8725, 1990
 A:Title: Mutations in genetic variants of human serum albumin found in Italy.
 A:Reference number: A38255; MWID:91062352; PMID:2247440
 A:Accession: C38255
 A:Molecule type: protein

A:Residues: 76-111 <GAL1>
 A:Cross-references: UNIPARC:UPI0000174403
 A:Accession: B38255
 A:Molecule type: protein
 A:Residues: 82-105, 'K', 107-110 <GAL2>
 A:Cross-references: UNIPARC:UPI0000174403
 A>Note: this variant is designated albumin Vibo Valentia
 A:Accession: A38255
 A:Molecule type: protein
 A:Residues: 76-83, 'K', 85-106 <GAL3>
 A:Cross-references: UNIPARC:UPI0000174405
 A>Note: this variant is designated albumin Torino
 R:Minchiotti, L.; Galliano, M.; Zapponi, M.C.; Tenni, R.
 Eur. J. Biochem. 214, 437-444, 1993
 A:Title: The structural characterization and bilirubin-binding properties of albumin Her
 A:Reference number: S33298; MWID:93292504; PMID:8513793
 A:Accession: S33298
 A:Molecule type: protein
 A:Residues: 253-263, 'E', 265-281 <MIN1>
 A:Cross-references: UNIPARC:UPI0000174406
 A>Note: this variant is designated albumin Herborn
 R:Minchiotti, L.; Galliano, M.; Stoppini, M.; Ferrri, G.; Crespeau, H.; Rochu, D.; Porta,
 Biochim. Biophys. Acta 1119, 232-238, 1992
 A:Title: Two alloalbumins with identical electrophoretic mobility are produced by differ
 A:Reference number: S21078; MWID:92190239; PMID:1347703
 A:Accession: S21078
 A:Molecule type: protein
 A:Residues: 354-356, 'K', 358-378 <MIN2>
 A:Cross-references: UNIPARC:UPI0000174407
 A>Note: this variant is designated albumin Sondrio; another variant Paris-2 is reported,
 R:He, X.M.; Garter, D.C.
 Nature 358, 209-215, 1992
 A:Title: Atomic structure and chemistry of human serum albumin.
 A:Reference number: A46756; MWID:92334427; PMID:1630489
 A:Contents: annotation; X-ray crystallography, 2.8 angstroms
 R:Brown, J.R.; Shockley, P.; Behrens, P.O.
 In The Chemistry and Physiology of the Human Plasma Proteins, Bing, D.H., ed., pp.23-40,
 A:Reference number: A94442
 A:Contents: annotation; three-dimensional structure and disulfide bonds
 R:Saber, M.A.; Stockbauer, P.; Moravek, L.; Meloun, B.
 Collect. Czech. Chem. Commun. 42, 564-579, 1977
 A:Title: Disulfide bonds in human serum albumin.
 A:Reference number: A90930
 A:Contents: annotation; disulfide bonds
 R:Jacobsen, C.
 Biochem. J. 171, 453-459, 1978
 A:Title: Lysine residue 240 of human serum albumin is involved in high-affinity binding
 A:Reference number: A90299; MWID:78186630; PMID:656055
 A:Contents: annotation; bilirubin-binding site
 R:Peterson, T.; Reed, R.G.
 In Albumin: Structure, Biosynthesis, Function, Peters, J., and Sjolholm, I., eds., 11-20,
 A:Reference number: A94408
 A:Contents: annotation; conformation and active sites.
 A:Contents: annotation; gene position
 R:Harper, M.E.; Dugaiczak, A.
 Am. J. Hum. Genet. 35, 565-572, 1983
 A:Title: Linkage of the evolutionarily-related serum albumin and alpha-fetoprotein genes
 A:Reference number: A90028; MWID:83279982; PMID:6192711
 A:Contents: annotation; gene position
 R:Walker, J.E.
 FBS Lett. 66, 173-175, 1976
 A:Title: Lysine residue 199 of human serum albumin is modified by acetyllysacyclic acid.
 A:Reference number: A46755; MWID:76257808; PMID:955075
 A:Contents: annotation
 A>Note: the nonenzymatic transfer of an acetyl group from aspirin (acetylsalicylic acid
 R:Bohney, J.P.; Fonda, M.L.; Feldhoff, R.C.
 FBS Lett. 298, 266-268, 1992
 A:Title: Identification of Lys(190) as the primary binding site for pyridoxal 5'-phospha
 A:Reference number: A56294; MWID:92183981; PMID:1544460
 A:Contents: annotation
 A>Note: the nonenzymatic binding of pyridoxal phosphate to lysine-214 is described; in p
 A:Accession: C38255
 C:Comment: Serum albumin, a predominant protein in the plasma of adults, is synthesized

A:Molecule type: mRNA
 A:Residues: 1-607

 A:Accession: UNIPROT:P14639; UNIPARC:UPI00001257CB; EMBL:X17055; NID:G1386; PIDN:
 C:Comment: Serum albumin is synthesized in the liver as preproalbumin. It binds copper,
 steroid hormones (weak bonds with these hormones promote their transfer across the membra
 C:Superfamily: serum albumin; serum albumin repeat homology
 C:Keyword: carrier protein; duplication; metal binding; plasma
 F:1-18/Domain: signal sequence #status predicted <PRO>
 F:19-24/Domain: propeptide #status predicted <PRO>
 F:25-607/Domain: serum albumin #status predicted <MAT>
 F:29-301/Domain: serum albumin repeat homology <SA1>
 F:220-393/Domain: serum albumin repeat homology <SA2>
 F:412-591/Domain: serum albumin repeat homology <SA3>
 F:27/Binding site: copper (His) #status predicted
 F:77-86,99-115,114-125,147-192,191-200,223-269,268-276,288-302,301-312,339-384,383-392,4
 F:263/Binding site: bilirubin (Lys) #status predicted

Query Match 68.3%; Score 2437.5; DB 1; Length 607;
 Best Local Similarity 75.0%; Pred. No. 76-153; Indels 1; Gaps 1;
 Matches 438; Conservative 73; Mismatches 72;

QY	89	RDANKSEVVAHRPKDGEENFKALVLIAPAYLQOCPEFEDHVKLVNVEVFPAKTCVADBSA	148
DB	24	RDTNKKSEIARRRFDLSEBNFQGLVLIAPSOYLQOCPEFEDHVKLVNVEVFPAKTCVADBSH	83
QY	149	ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOBERNECFLOHKDNPMLPRLVPE	208
DB	84	AGCDKSLHTLFGDELCKVATLRETYGDMADCCAKOBERNECFIHKDSDPLPKL-KPE	142
QY	209	VDVWCTAFHNDNETFLKYLIEIARRHPYVYAPPELLPFAKRYKAALTECCQADAKACIL	268
DB	143	PDLTCLAEFPAFDEKFKWGLYEVARRHPYVYAPPELLYVANKVNGVVECCQADKACIL	202
QY	269	PKLDELARDGKASAKORLCKASLQKFGSRAPVAVARLSORPFAEFAEYSKLVTDLT	328
DB	203	PKLDAREKVLASSARQRLKASIQKFGSERALKAVASVARIQKFPKADPTDVTKLVTDLT	262
QY	329	KVHTTECGHDLDECADRDADLAKYICENODSISSKLEKCEKPELKRSHCIAEVENDEMP	388
DB	263	KVHKTECGHDLDECADRDADLAKYICDHODALSSKLEKCEKPELKRSHCIAEVDVAPE	322
QY	389	ADLPSLAADPVEKDYCKVYAKKDYVLFGLMFLYEVARRHPDYVLIILAKLKYETLTK	448
DB	323	ENLPRPLTADFAEPRKEVCVKYQEKDVFLSFLYEVARRHPDYVLIILRAKYEATLTD	382
QY	449	CCAAPAPHECVYAKVPEFEPKLVVEPQNLKONCELEFQEGYKFNQALLVRYTKKYPQVS	508
DB	383	CKAKEDPHACYATVFDKLVKLVDEPQNLKONCELEFQEGYKFNQALLVRYTKKAPQVS	442
QY	509	TPTLVEVSRLTGKVGSKCKGHPBAKMPCAEDYLVVNLQLCVLRKTPVSDRVTKCTE	568
DB	443	TPTLVEVSIKVGKVGKCKAKPESEMPCTEDYLSIILNRVLCVLRKTPVSEKVTCKCTE	502
QY	569	SLVNRPPCGSALAEVDSTYVYKFNASTPTFHADICTLSKSERQIKKQTLVLYEKRPKA	628
DB	503	SLVNRPPCGSADLTDITVYKPRDEKRFTHADICTLPTKIKKQTLVLYELKIRKPPA	562
QY	629	TKEQLKAVWMDFAAFPEKCKKADDKETCFABEKKKLVAAASQAAVL	672
DB	563	TDEQLKXTVMENFAAFVADKCCAADDKSGCFVLRGPKLVASTQAAVL	606

RESULT 7
 ABRIS
 serum albumin precursor - rat
 N/Alternate names: preproalbumin
 C/Species: Rattus norvegicus (Norway rat)
 C/Date: 31-May-1979 #revision 31-May-1979 #text change 09-Jul-2004
 C/Accession: A93872; A92211; A91946; A91940; C45800; I57621; A03233
 R:Source: T. D.; Yang, M.; Bonner, J
 Proc. Natl. Acad. Sci. U.S.A. 78, 243-246, 1981
 A>Title: Nucleotide sequence of cloned rat serum albumin messenger RNA.
 A:Reference number: A93872; MUID:81223722; PMID:7017712

Query Match 68.1%; Score 2431; DB 1; Length 608;
 Best Local Similarity 73.5%; Pred. No. 1.9e-152; Indels 0; Gaps 0;
 Matches 429; Conservative 82; Mismatches 73;

QY	89	RDANKSEVVAHRPKDGEENFKALVLIAPAYLQOCPEFEDHVKLVNVEVFPAKTCVADBSA	148
DB	24	RDANKSEIARRRFDLSEBNFQGLVLIAPSOYLQOCPEFEDHVKLVNVEVFPAKTCVADBSA	83
QY	149	ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOBERNECFLOHKDNPMLPRLVPE	208

A:Accession: A93872
 A:Molecule type: mRNA
 A:Residues: 1-608 <SAR>
 A:Cross-references: UNIPROT:P02770; UNIPARC:UPI00001257CA; GB:V01222; GB:J00698; NID:955
 R:Strasser, A.W.; Bennett, C.D.; Donohue, A.M.; Rodkey, J.A.; Alberts, A.W.
 J. Biol. Chem. 252, 6846-6855, 1977
 A>Title: Rat liver pre-proalbumin: complete amino acid sequence of the pre-piece. Analys
 A:Reference number: A92211; MUID:77249657; PMID:933447
 A>Note: cleavages during protein maturation
 A:Accession: A92211
 A:Molecule type: protein
 A:Residues: 1-38 <STR>
 A:Cross-references: UNIPARC:UPI0000174416
 R:Isemura, S.; Ikenaka, T.
 J. Biochem. 83, 35-48, 1978
 A>Title: Amino acid sequences of fragments I and II obtained by cyanogen bromide cleavage
 A:Reference number: A91946; MUID:78109429; PMID:564345
 A:Accession: A91946
 A:Molecule type: protein
 A:Residues: 25-222 <ISI>
 A:Cross-references: UNIPARC:UPI0000174417
 R:Isemura, S.; Ikenaka, T.
 J. Biochem. 79, 1183-1196, 1976
 A>Title: Fragmentation of rat serum albumin by cyanogen bromide cleavage and the amino a
 A:Reference number: A91940; MUID:76260153; PMID:956149
 A:Accession: A91940
 A:Molecule type: protein
 A:Residues: 223-288;572-608 <IS2>
 A:Cross-references: UNIPARC:UPI0000174418; UNIPARC:UPI0000174419
 A>Note: 262-Leu was also found
 R:Aoyagi, Y.; Ikenaka, T.; Ichida, F.
 Cancer Res. 38, 3483-3486, 1978
 A>Title: Copper(II)-binding ability of human alpha-fetoprotein.
 A:Reference number: A90758; MUID:79001617; PMID:80265
 A:Accession: C45800
 A:Status: preliminary
 A:Stature: preliminary
 A:Molecule type: protein
 A:Residues: 166-173 <CAR>
 A:Cross-references: UNIPARC:UPI000017441A
 R:Heard, J.
 Mol. Cell. Biol. 7, 2425-2434, 1987
 A>Title: Determinants of rat albumin promoter tissue specificity analyzed by an improved
 A:Reference number: I57621; MUID:87286876; PMID:3475566
 A:Accession: I57621
 A:Stature: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 1-5 <RES>
 A:Cross-references: UNIPARC:UPI00001188B8; GB:M16825; NID:9202828; PIDN:AAA40712.1; PID:
 C:Superfamily: serum albumin; serum albumin repeat homology
 C:Keyword: carrier protein; duplication; metal binding; plasma
 F:1-18/Domain: signal sequence #status experimental <PRO>
 F:19-24/Domain: propeptide #status experimental <PRO>
 F:25-608/Domain: serum albumin #status experimental <MAT>
 F:29-302/Domain: serum albumin repeat homology <SA1>
 F:221-394/Domain: serum albumin repeat homology <SA2>
 F:413-592/Domain: serum albumin repeat homology <SA3>
 F:27/Binding site: copper (His) #status experimental
 F:77-86,99-115,114-125,148-193,192-270,269-277,289-303,302-313,340-385,384-393,4


```

84 ENDDKSIHTLFDGKLCALPKLRDNYGELADCCAKQSEBNEBCEFLQHKDDNPNLPRFORPE 143
209 VDMCTAFHNDNETFLPKYLYEIAARRHPYFAPELLFPAKRYKAAFTCCQAADKAAACL 268
144 AEMACTSFGNPNPSPFLGHYIHEVARRHPPYFAPELLYAKRYEVLTOCCETBEDKAAACL 203
269 PKLDELREDEGKASSAQRKLCASLQKRGERRAFKAWAVARLSORPPKAEFAVSKLVTDLT 328
204 PKLDVAVERKALVAANVRKMKSSMORFGEPRAFKAWAVARLSORPPKAEFAITKLAITDVT 263
329 KYHTTECGHDLLECADRDADLAKYTCENQDSTSSKLEKCEKPELLEKSHCIAEVENDEMP 388
264 KINKECCHGDLLECADRDADLAKYTCENQDSTSSKLEKCEKPELLEKSHCIAEVENDEMP 323
389 ADLPSLAADFVESHKDYCKNYAABKADYFLGMPFLYEYARRHPDYSSVLLRLAKTYETTLER 448
324 ADLPSLAADFVESHKDYCKNYAABKADYFLGMPFLYEYARRHPDYSSVLLRLAKTYETTLER 383
449 CCAAADPHECYAVFDEFRPLVEBPQNLIKONCELEPQLGEYKRONALLVRYTKKVPQVS 508
384 CCAEGRPACYGTVLAEFQPLVEBPQNLIKONCELEPQLGEYKRONALLVRYTKKVPQVS 443
509 TPTLVESRNLGKVGSKCKKHPBAKRMPCAEYLSVVLNQLCVLHEKTPVSDRYTKCCE 568
444 TPTLVESRNLGKVGSKCKKHPBAKRMPCAEYLSVVLNQLCVLHEKTPVSDRYTKCCE 503
569 SLVNRPPCFSALEVDDETYVYKPEFNAETFTFHADICTLSEKEROIKQQTALVELVKKPKA 628
504 SLVNRPPCFSALEVDDETYVYKPEFNAETFTFHADICTLSEKEROIKQQTALVELVKKPKA 563
629 TKEQLKAVMDPFAAFVYKCCCKADDKETCPAEBEGKLVVAAGQAL 672
564 TEOQLKAVMDPFAAFVYKCCCKADDKETCPAEBEGKLVVAAGQAL 607

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RESULT 8

```

ABRGS
serum albumin precursor - pig (fragment)
C/Species: Sus scrofa domestica (domestic pig)
C/Date: 31-Dec-1993 #sequence_rev1sion 31-Dec-1993 #text_change 09-Jul-2004
C/Accession: S01382; A61006
R:Meinrock, J.; Baldwin, G.S.
Nucleic Acids Res. 16, 9045, 1988
A>Title: Nucleotide sequence of porcine liver albumin.
A:Reference number: S01382; MUID:89016582; PMID:3174440
A:Accession: S01382
A>Status: translation not shown
A:Molecule type: mRNA
A:Residues: 1-605 <WEI>
A/Cross-references: UNIPROT:P08835; UNIPARC:UPI00001257C7; EMBL:X12422; NID:q1875; PIDN:R;Limeback, H.; Sakarya, H.; Chu, W.; Mackinnon, M.
J. Bone Miner. Res. 4, 235-241, 1989
A>Title: Serum albumin and its acid hydrolysis peptides dominate preparations of mineral
A:Reference number: A61006; MUID:89265765; PMID:2728927
A:Molecule type: protein
A:Residues: 23-51, 'X', '53-54', 'XXXXY', '146', 'E', '148', 'E', '150-151', 'XVW', '155 <LIM>
A/Cross-references: UNIPARC:UPI0000174414; UNIPARC:UPI0000174415
A:Experimental source: dental enamel
A>Note: albumin and other serum proteins are also found in bone
C/Comment: Serum albumin is synthesized in the liver as preproalbumin. It binds copper,
steroid hormones (weak bonds with these hormones promote their transfer across the membra
C/Superfamily: serum albumin; serum albumin repeat homology
C/Keywords: carrier protein; duplication; metal binding; Plasma
F:1-16/Domain: signal sequence (fragment); #status predicted <SIG>
F:1-22/Domain: propeptide #status predicted <PRO>
F:23-605/Product: serum albumin #status predicted <MAT>
F:27-199/Domain: serum albumin repeat homology <SA1>
F:218-391/Domain: serum albumin repeat homology <SA2>
F:410-589/Domain: serum albumin repeat homology <SA3>
F:75-84, 97-113, 112-123, 145-190, 189-198, 221-267, 266-274, 286-300, 299-310, 337-382, 381-390, 4
F:261/Binding site: bilirubin (Lys) #status predicted

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Query Match 67.7%; Score 2416.5; DB 1; Length 605;
Best Local Similarity 76.1%; Pred. No. 1.7e-151;
Matches 439; Conservative 67; Mismatches 70; Indels 1; Gaps 1;

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89 RAAKSEVAAHFKDYGSENFKALVLIAPAOYIQQCFPEBHVKLVNVEVPATCVADESA 148
22 RLYYSEIARRKFDLGEQYFKGLVLIAPSOHLQQCFPEBHVKLVNVEVPATCVADESA 81
149 ENCDKSIHTLFDGKLCALPKLRDNYGELADCCAKQSEBNEBCEFLQHKDDNPNLPRVRE 208
82 ENCDKSIHTLFDGKLCALPKLRDNYGELADCCAKQSEBNEBCEFLQHKDDNPNLPRVRE 140
209 VDMCTAFHNDNETFLPKYLYEIAARRHPYFAPELLFPAKRYKAAFTCCQAADKAAACL 268
141 PVALCADFQEDQKFMKGLYIARRHPYFAPELLYAKRYEVLTOCCETBEDKAAACL 200
269 PKLDELREDEGKASSAQRKLCASLQKRGERRAFKAWAVARLSORPPKAEFAVSKLVTDLT 328
201 PKLDELREDEGKASSAQRKLCASLQKRGERRAFKAWAVARLSORPPKAEFAVSKLVTDLT 260
329 KYHTTECGHDLLECADRDADLAKYTCENQDSTSSKLEKCEKPELLEKSHCIAEVENDEMP 388
261 KYHTTECGHDLLECADRDADLAKYTCENQDSTSSKLEKCEKPELLEKSHCIAEVENDEMP 320
389 ADLPSLAADFVESHKDYCKNYAABKADYFLGMPFLYEYARRHPDYSSVLLRLAKTYETTLER 448
321 ADLPSLAADFVESHKDYCKNYAABKADYFLGMPFLYEYARRHPDYSSVLLRLAKTYETTLER 380
449 CCAAADPHECYAVFDEFRPLVEBPQNLIKONCELEPQLGEYKRONALLVRYTKKVPQVS 508
381 CCAEGRPACYGTVLAEFQPLVEBPQNLIKONCELEPQLGEYKRONALLVRYTKKVPQVS 440
509 TPTLVESRNLGKVGSKCKKHPBAKRMPCAEYLSVVLNQLCVLHEKTPVSDRYTKCCE 568
441 TPTLVESRNLGKVGSKCKKHPBAKRMPCAEYLSVVLNQLCVLHEKTPVSDRYTKCCE 500
569 SLVNRPPCFSALEVDDETYVYKPEFNAETFTFHADICTLSEKEROIKQQTALVELVKKPKA 628
501 SLVNRPPCFSALEVDDETYVYKPEFNAETFTFHADICTLSEKEROIKQQTALVELVKKPKA 560
629 TKEQLKAVMDPFAAFVYKCCCKADDKETCPAEBEGKLVVAAGQAL 672
561 TEOQLKAVMDPFAAFVYKCCCKADDKETCPAEBEGKLVVAAGQAL 607

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RESULT 9

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albumin - Mongolian jird
C/Species: Meriones unguiculatus (Mongolian jird)
C/Date: 05-Mar-1998 #sequence_rev1sion 13-Mar-1998 #text_change 09-Jul-2004
C/Accession: JCS838
R:Yoshida, K.; Seto-Ohashima, A.; Simohara, H.
DNA Res. 4, 351-354, 1997
A>Title: Sequencing of cDNA encoding serum albumin and its extrahepatic synthesis in th.
A:Reference number: JCS838; MUID:98116663; PMID:9455485
A:Accession: JCS838
A:Molecule type: mRNA
A:Residues: 1-609 <YOS>
A/Cross-references: UNIPROT:Q35090; UNIPARC:UPI00001257C5; DDBJ:AB006197; NID:q2317277;
A:Experimental source: liver
C/Superfamily: serum albumin; serum albumin repeat homology
F:222-395/Domain: serum albumin repeat homology <SA2>
Query Match 66.9%; Score 2387.5; DB 2; Length 609;
Best Local Similarity 73.8%; Pred. No. 1.4e-149;
Matches 432; Conservative 65; Mismatches 87; Indels 1; Gaps 1;
89 RD-AHRSVAHRRKDIQGERFKLVLIAPAOYIQQCFPEBHVKLVNVEVPATCVADSS 147
24 RDAVAHRSVAHRRKDIQGERFKLVLIAPAOYIQQCFPEBHVKLVNVEVPATCVADSS 83
148 AEMACTSHTLFDGKLCALPKLRDNYGELADCCAKQSEBNEBCEFLQHKDDNPNLPRVRE 207

```

Db 84 AENCDSDKHTLFGDDKLCSPNFRGEKKAEMADCCAKOEPERRNRCFLQHKDNDNQLDPEFKKA 143
 QY 208 EVDVWCTAHHNDEEPEFLKKYLYE IARRHYFYAPPELLFPAKRYKAAFTCCOAAADFACTL 267
 Db 144 EBPAMCTAQOENAEADPMGHLYLHVARRHYFYGGPELLYLDKTTAVTLTCCAADKGAQL 203
 QY 268 LPKLDELDEBGRKASAKORLKLKASLQKFGSRAFKAVANVARLSQRPKAEFAVSKLVTL 327
 Db 204 TRPLDYLKRRKALVAVRQRLLKCSMSMKKFGERRAFKAVAVRMSQTFPNADFAETTKATL 263
 QY 328 TKYHTECGGDLIECADRDADLAKYI CENODSISSTLKECCERPLLEKSHCIAEYNDM 387
 Db 264 TKYTOECCHGDLIECADRDADLAKYI CENODSISSTLKECCERPLLEKSHCIAEYNDM 323
 QY 388 PADLPSLADPVESSKOVCKNYAEAKDVPFGMFLYEXARRHPPDYSVLLRLAKTYETTL 447
 Db 324 PADLPSLADPVESSKOVCKNYAEAKDVPFGMFLYEXARRHPPDYSVLLRLAKTYETTL 383
 QY 448 KCGAADPHECVAKVDFEPEFLVEEPQNTIKONCELPFOLGSEYKFNALLVRYTKKVPQV 507
 Db 384 KCGAADPHECVAKVDFEPEFLVEEPQNTIKONCELPFOLGSEYKFNALLVRYTKKVPQV 443
 QY 508 STEPTLVEVRNLTGKVGSKCCKHPKAEKMPGAEVYLSVTLNQLCVLHEKTPVSDRVTKCT 567
 Db 444 STEPTLVEVRNLTGKVGSKCCKHPKAEKMPGAEVYLSVTLNQLCVLHEKTPVSDRVTKCT 503
 QY 568 ESTLVNRRPCCSALVEVETVYVPEKFNATPTFHADICTLSEKEROIKKQATALVELVYKGRK 627
 Db 504 GSTLVNRRPCCSALVEVETVYVPEKFNATPTFHADICTLSEKEROIKKQATALVELVYKGRK 563
 QY 628 ATKEQKAAVWDPEAFVKEKCKKADDKETCFABEGKQLVAASQAA 672
 Db 564 ATKEQKAAVWDPEAFVKEKCKKADDKETCFABEGKQLVAASQAA 608

RESULT 10
 A05139
 serum albumin - mouse (fragment)
 C/Species: Mus musculus (house mouse)
 C/Date: 09-Jun-1987 #sequence_revision 17-Mar-2000 #text_change 09-Jul-2004
 C/Accession: A05139; 148638
 R/Minghetti, P.P.; Law, S.W.; Dugaiczky, A.
 Mol. Biol. Evol. 2, 347-358, 1985
 A/Title: The rate of molecular evolution of alpha-fetoprotein approaches that of pseudog
 A/Reference number: A93055; MID:88216133; PMID:2452956
 A/Accession: A05139
 A/Molecule type: mRNA
 A/Residues: 1-418 <MIN>
 A/Cross-references: UNIPROT:P07724; UNIPARC:UPI000016CBE6; GB:M16111; MID:g191764; PIDN:
 R:Bocaccio, C.; Deschatrete, J.; Meunier-Rotival, M.
 Gene 88, 181-186, 1990
 A/Title: Empty and occupied insertion site of the truncated LINE-1 repeat located in the
 A/Reference number: 148638; MID:90269606; PMID:1971802
 A/Accession: 148638
 A/Status: preliminary; translated from GB/EMBL/DBJ
 A/Molecule type: DNA
 A/Residues: 379-453 <BOC>
 A/Cross-references: UNIPARC:UPI000016CEAB; EMBL:X13060; MID:g529339; PIDN:CAA31458.1; PID
 C/Superfamily: serum albumin; serum albumin repeat homology
 C/Keywords: carrier protein; duplication; metal binding; plasma
 F:1-104/Domain: serum albumin repeat homology (fragment) <SA1>
 F:123-296/Domain: serum albumin repeat homology <SA2>
 F:315-453/Domain: serum albumin repeat homology (fragment) <SA3>

Query Match 52.2%; Score 1861; DB 2; Length 453;
 Best Local Similarity 72.2%; Pred. No. 4.4e-115;
 Matches 327; Conservative 64; Mismatches 62; Indels 0; Gaps 0;

QY 164 CVYATLRHYGEMADCCAKOEPERRNRCFLQHKDNDNQLDPEFKKA 223
 Db 1 CALPNLRNNGELADCCAKOEPERRNRCFLQHKDNDNQLDPEFKKA 60

QY 224 LKTYIYETARRHPPYAPPELLFPAKRYKAAFTCCOAAADFACTL 283
 Db 61 MGHYHVEVARRHPPYAPPELLYFAEQVNEIITQCAEADKESCLTPKLDGVEKALVSSV 120
 QY 284 KORLCKASLQKFGSRAFKAVANVARLSQRPKAEFAVSKLVTL 343
 Db 121 KORLCKASLQKFGSRAFKAVANVARLSQRPKAEFAVSKLVTL 180
 QY 344 DDRADLAKYICENODSISSTLKECCERPLLEKSHCIAEYNDM 403
 Db 181 DDRADLAKYICENODSISSTLKECCERPLLEKSHCIAEYNDM 240
 QY 404 VCKNYAEAKDVPFGMFLYEXARRHPPDYSVLLRLAKTYETTL 463
 Db 241 VCKNYAEAKDVPFGMFLYEXARRHPPDYSVLLRLAKTYETTL 300
 QY 464 DEFKPLVEEPQNTIKONCELPFOLGSEYKFNALLVRYTKKVPQV 523
 Db 301 DEFKPLVEEPQNTIKONCELPFOLGSEYKFNALLVRYTKKVPQV 360
 QY 524 SKCKHPPKAEKMPGAEVYLSVTLNQLCVLHEKTPVSDRVTKCT 583
 Db 361 SKCKHPPKAEKMPGAEVYLSVTLNQLCVLHEKTPVSDRVTKCT 420
 QY 584 EYVYVPEKFNATPTFHADICTLSEKEROIKKQATALVELVY 616
 Db 421 EYVYVPEKFNATPTFHADICTLSEKEROIKKQATALVELVY 453

RESULT 11
 ABCHS
 serum albumin precursor - chicken
 C/Species: Gallus gallus (chicken)
 C/Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 09-Jul-2004
 C/Accession: S15571; A05078; A13451
 R/Casady, A.I.; Salikild, C.K.; Bayerbrock, P.; Wallace, J.C.
 submitted to the EMBL Data Library, July 1991
 A/Reference number: S15571
 A/Accession: S15571
 A/Molecule type: mRNA
 A/Residues: 1-615 <CAS>
 A/Cross-references: UNIPROT:P19121; UNIPARC:UPI00001257C1; EMBL:X60688; MID:g63747; PIDN
 R:Hache, R.U.G.; Wiskocil, R.; Vasa, M.; Roy, R.N.; Lau, P.C.K.; Deeley, R.G.
 J. Biol. Chem. 258, 4556-4564, 1983
 A/Title: The 5' noncoding and flanking regions of the avian very low density apolipoprot
 A/Reference number: A05078; MID:83161037; PMID:6187737
 A/Accession: A05078
 A/Molecule type: DNA
 A/Residues: 1-28 <HAC>
 A/Cross-references: UNIPARC:UPI000017128E; GB:V00381; MID:g63038; PIDN:CAA23680.1; PID:9
 R:Rosen, A.M.; Geller, D.M.
 Biochem. Biophys. Res. Commun. 78, 1060-1066, 1977
 A/Title: Chicken microosomal albumin: amino terminal sequence of chicken proalbumin.
 A/Reference number: A13451; MID:78019943; PMID:911327
 A/Accession: A13451
 A/Molecule type: protein
 A/Residues: 19-23, 'W', 25-30 <ROS>
 A/Cross-references: UNIPARC:UPI000017441B
 C/Comment: Serum albumin is synthesized in the liver as preproalbumin. It binds copper,
 mores (weak bonds with these hormones promote their transfer across the membranes), thy
 C/Superfamily: serum albumin; serum albumin repeat homology
 C/Keywords: carrier protein; duplication; metal binding; plasma
 F:1-18/Domain: signal sequence #status predicted <SIG>
 F:19-26/Domain: propeptide #status predicted <PRO>
 F:27-613/Domain: serum albumin #status predicted <MNT>
 F:32-206/Domain: serum albumin repeat homology <SA1>
 F:225-398/Domain: serum albumin repeat homology <SA2>
 F:417-596/Domain: serum albumin repeat homology <SA3>
 F:30/Binding site: copper (His) #status predicted
 F:80-89,102-118,117-128,152-197,196-205,228-274,273-281,293-307,306-317,344-389,388-397,

Query Match 43.8%; Score 1562; DB 1; Length 615;
 Best Local Similarity 46.9%; Pred. No. 3.1e-95;

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Matches 276; Conservative 118; Mismatches 192; Indels 2; Gaps 2;
QY 89 RDA-HKSEVARRPKDI-GEENFKALVLIAPAYLQOCPEFDHVLVNEVFATKCVADDES 147
D 26 RDASHESEIHRHNDLKESEFFKAVAMITTFQYIQRCSYEGSLVDYDVLDAKCVANED 85
QY 148 AENCDSLHLLTLPDGLCTVAITRETYGEMADCCAKQEPERNFCEFLQHKDNDPMLPR-LVR 206
D 86 APGCSRPLPILIDELIQVBEKLADSYGAMADCCSKADPERNECFLESPKQDPFVQPYOR 145
QY 207 PEVDVWCTAFHDNDEEFTFLKLYLEIARRHRYFPAPBELLFPAAKYKAATFCCQAAADKAAC 266
D 146 PASDVLICQEVQDNRVSEFLGHFYIYVARRHPLFYAVALISFAVDPEHMLQSCCKESPDVAC 205
QY 267 LLPKLELDLDEBGRKASSAKORLYKASLQKFEGERAFKMAVAVARLSGRPFPKAFAPAVSLVMD 326
D 206 LDTKELVWRKAKAVSVSKQOYFGGILKQKGFEDRVDVQALTYLSQKPKAPDFSEVSEVHD 285
QY 327 LTKVHTCCSGDILLECADRADLAKYICENQDSISSKLEKCEKPKLLEKSHCIAEVENDE 386
D 266 SIGVHNECCGDVAVCEMDVWARMSNLSGQDDYFSGKIKKCCCKRPIVERSOCLMEARFDE 325
QY 387 MPADLPSLAADPVEESKDVCKNYAVAKDVLGMFLYEVARRHPYISVVLIRLAKTYEYTL 446
D 326 KPADLPSLVEKYIETDEKVEVCKSPFAGHDAFMAEFVEYSRRHPFFSITQILIRIAKGYESLL 385
QY 447 EKCCAAADPHEKCAKVPDEFKPLVVEBPONLIKONCELFEOLGSEYKFNALLVYTYKVPQ 506
D 386 EKCCKTNDPACYANAGOSLNQHHKETAQYVTKTCDLHHDGHEADFLKSTLIRYTKMPQ 445
QY 507 VSTPTLVEVSRNLTGKVSCKKHPBEAKRMPCAEDYLSVNLQCVLHEKTPVSDRVTYKCC 566
D 446 VPTDILLIEGSKMTTITGTCCQGLGEBRMAKCSGYLSIVHDTCRKQETPTIPINDVNSQCC 505
QY 567 TESLVNRRPCFSALVDVETVYPKEFNAPTPTPHADICTLSEKERQIKQFALVELYVKRP 626
D 506 SQLYANRRPCEFTJMMGVDTKVPFDFNDFMESDFEKLCSADAPAESEVQKMLLNTLIRKRP 565
QY 627 KATKQKAVMDPPAFVEKCKCKADKDETGTGFAERGGKLVVAASAALGL 674
D 566 QMTEBQIKTITADGFTAMVADCKKQSDINTCFGEBGANLIVQSRTVIGI 613

RESULT 12
JC4238
Alpha-fetoprotein precursor - chimpanzee
C/Species: Pan troglodytes (chimpanzee)
C/Date: 27-Nov-1995 #sequence_revision 08-Feb-1996 #text_change 09-Jul-2004
C/Accession: J04258
R./NIBho, H.; Gibbs, P.E.M.; Minghetti, P.P.; Zielinski, R.; Dugaiczky, A.
Gene 162, 213-220, 1995
A./Title: The chimpanzee alpha-fetoprotein-encoding gene shows structural similarity to
A./Reference number: J04258; MUID:96032345; PMID:7557431
A./Accession: J04258
A./Molecule type: DNA
A./Residues: 1-609 <N1S>
A./Cross-references: UNIPROT:Q28789; UNIPARC:UPI000012A6FA; GB:U21916; NID:G841311; PIDN:
C/Comment: This protein is a plasma protein produced in the fetal and neonatal liver and
C/Gene: Similar properties and structure.
A./Gene: atfp
A./Map position: 3p
A./Intons: 29/1; 46/2; 90/3; 161/2; 205/3; 238/2; 281/3; 353/2; 397/3; 430/2; 476/3; 551
C./Superfamily: serum albumin; serum albumin repeat homology
C/Keywords: signal sequence #status predicted <SIG>
F./1-19/Domain: alpha-fetoprotein #status predicted <SIG>
F./20-609/Product: alpha-fetoprotein #status predicted <MNT>
F./20-202/Domain: serum albumin repeat homology <SAt>
F./21-394/Domain: serum albumin repeat homology <SAt>
F./413-592/Domain: serum albumin repeat homology <SAt>
F./42,251/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 35.3%; Score 1260.5; DB 2; Length 609;

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Best Local Similarity 39.7%; Pred. No. 2,1e-75;
Matches 238; Conservative 117; Mismatches 238; Indels 7; Gaps 3;
QY 81 FLAMLVKGVDAKSE-----VAHREFKDLEGSENFKALVLIAPAYLQOCPEFDHVLVNEV 135
D 11 FLINPHESTLRNRENGIASIIDSQCSTAEIYLLDGLATIFPAQFPQGEATKYKSVKVVWVKA 70
QY 136 TERAKTQVADSEANCDKSLHLLTLPDGLCTVAITRETYGEMADCCAKQEPERNFCEFLQHK 195
D 71 LVAIEKPTGDQESAGCLEENQLPALFEELCREKREIIEKYGH-SDCCSQSBEGHNHCLAFK 129
QY 196 DDPN-MLPRLVPEVDVWCTAFHDNDEEFTFLKLYLEIARRHRYFPAPBELLFPAAKYKA 254
D 130 KPTPASIPEFOVPEPRTSCFAVYEBRETFMNRPIYEIARRHPLFYAVALISFAVDPEHML 189
QY 255 TEOCQADKAACILPRLDGLDEBGRKASSAKORLYKASLQKFEGERAFKMAVAVARLSGRPFP 314
D 190 PSCCKAENAVCEQTKAATVYTELKSSSLNNOGAQVKNFGRTRFOALTYTKLSQKPTK 249
QY 315 ABEFVSKLVTDLTTKVHTCCSGDILLECADRADLAKYICENQDSISSKLEKCEKPKLLE 374
D 250 VAPTEIQKLVLDVAHNEHCRCRGLVDCLQDGEKIMSYICSQDDTLNKTITECCKRLTLE 309
QY 375 KSHCIAEVENDEMPADLPSLAADPVEESKDVCKNYAVAKDVLGMFLYEVARRHPYISVVL 434
D 310 RGQCIITHAENDEKPEGLSFMNLRFLGDRDFNPFSSGSEKNIPLASVHEYSRRHPOLA 369
QY 435 LRLAKTYEYTLLEKCGAANDPHEKCAKVPDEFKPLVVEBPONLIKONCELFEOLGSEYKFN 494
D 370 ILRVAQYDELLEKCFQTEPNPLECDQGESELEQKI QESQALAKSCKGLFKIGERYLDQ 429
QY 495 ALIYRKYKVPQVSTPTLVEVSRNLTGKVSCKKHPBEAKRMPCAEDYLSVNLQCVLHE 554
D 430 APLVATTKKAPQLTSSSELMATIRKMAATATCCQGLSEDLILACGSEAAIDIIIGHLCIR 489
QY 555 KTPVSDRVTYKCCCTESLVNRRPCFSALVDVETVYPKEFNAPTPTPHADICTLSEKERQIK 614
D 490 TTPVNPVQCCTCSVYANRRPCEFTJMMGVDTKVPFDFNDFMESDFEKLCSADAPAESE 549
QY 615 QPLVLYNHNKRAKTYEYTLLEKCGAANDPHEKCAKVPDEFKPLVVEBPONLIKONCELF 674
D 550 QEFLINLVKQKPTITREBLEAVIADPFSGLLEKCCQGOEVCFAERGGKLVVAASAALGL 609

RESULT 13
PFDU
Alpha-fetoprotein precursor [validated] - human
N./Alternate names: AFP; alpha-1-fetoprotein; alpha-fetoglobulin
C/Species: Homo sapiens (man)
C/Date: 19-Feb-1984 #sequence_revision 19-Feb-1984 #text_change 09-Jul-2004
C/Accession: A26624; S37655; A93961; A91497; A23699; A61480; A90624; A90757; A93042; A0:
R./Gibbs, P.E.M.; Zielinski, R.; Boyd, C.; Dugaiczky, A.
Biochem J 26, 1352-1343, 1987
A./Title: Structure, polymorphism, and novel repeated DNA elements revealed by a complete
A./Reference number: A26624; MUID:87185438; PMID:2436661
A./Accession: A26624
A./Molecule type: DNA
A./Residues: 1-609 <G1B>
A./Cross-references: UNIPROT:P02771; UNIPARC:UPI0000012A9; GB:M16110; NID:G773678; PIDN:
R./McVey, J.H.; Michaelides, K.; Hansen, L.P.; Ferguson-Smith, M.; Tighman, S.; Krumanlavu
Hum. Mol. Genet. 2, 379-384, 1993
A./Title: A G->A substitution in an HNF I binding site in the human alpha-fetoprotein ge
A./Reference number: S37655; MUID:93278385; PMID:7684942
A./Accession: S37655
A./Molecule type: DNA
A./Residues: 1-28 <MCV>
A./Cross-references: UNIPARC:UPI000016A4DF; EMBL:Z19532; NID:G28527; PIDN:CAA79592.1; PFI
R./Morinaga, T.; Sakai, M.; Wegmann, T.G.; Tamaki, T.
Proc. Natl. Acad. Sci. U.S.A. 80, 4604-4608, 1983
A./Title: Primary structures of human alpha-fetoprotein and its mRNA.
A./Reference number: A93961; MUID:83273664; PMID:6192439
A./Accession: A93961

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OY 547 NOLCVLHEKTPVSDRVTKCCSTESLVNRRPFSALAEVDEFTYVPEFNAETFTFHADICTLS 606
Db 481 GHWCEBQKKTFTINNHVAHCCTDSYSGMRSCFTALGPDDEDYVPPVTDDTFFHFDDKICTAN 540
OY 607 EKERQIKQJALVELVKHKPKATKEQLKAVMDDFAAFVEKCCCKADDKETCFABEGKLVYA 666
Db 541 DKEKOHKQKFLVKLIKVSFKLEKNHIDCSAEFLMKVQKCCCTADHDHPCFDTKEPVLIE 600
OY 667 ASQ 669
Db 601 HCO 603

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Search completed: April 19, 2006, 12:09:59
 Job time : 32.6364 secs

GenCore version 5.1.7
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OM protein - protein search, using bw model

Run on: April 19, 2006, 11:57:02 ; Search time 178.074 Seconds
(without alignments)
2670.387 Million cell updates/sec

Title: US-10-775-180-447
Perfect score: 3568
Sequence: 1 NM1F1F1FLSLSTVQGLHRT.....TCFAEKGKLVVAASQALGLD 674

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2166443 seqs, 705528306 residues
Total number of hits satisfying chosen parameters: 2166443

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UniProt 05.80:*
1: uniprot_sprot:*
2: uniprot_tramb1:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being predicted, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3108	87.1	609	1	ALBU_HUMAN P02768 homo sapien
2	3108	87.1	609	1	Q645G4_HUMAN Q645G4 homo sapien
3	3108	87.1	609	2	Q5NVH5_PONPY Q5NVH5 pongo pygma
4	3084	86.4	609	2	Q68DM5_HUMAN Q68DM5 homo sapien
5	3073	86.1	609	2	Q56G89_HUMAN Q56G89 homo sapien
6	3066	85.9	627	2	Q5DD07_HUMAN Q5DD07 homo sapien
7	2947	82.6	600	1	ALBU_MRCMU P49064 macaca mula
8	2627	73.6	608	1	ALBU_FELCA P49064 felis glive
9	2574	72.1	608	1	ALBU_CANPA P49822 canis famli
10	2509	70.3	608	2	Q95VB7_SCHMA Q95VB7 schistosoma
11	2501.5	70.1	607	1	ALBU_EQUAS P35747 equus caball
12	2481.5	69.5	607	1	ALBU_HORSE O642P7 xenopus lae
13	2469	69.2	608	2	Q5BEG8_MICRO Q5BEG8 microtus fo
14	2462	69.0	608	2	ALBU_RABIT P49065 microtus lag
15	2460	68.9	608	2	Q5BEG9_MICRO Q5BEG9 microtus lag
16	2455.5	68.8	607	1	ALBU_BOVIN P02769 bos taurus
17	2438	68.3	607	1	Q5U3X3_RAT Q5U3X3 rattus norv
18	2437.5	68.3	607	1	ALBU_SHEEP P14639 ovie aries
19	2431	68.1	608	1	ALBU_RAT P02770 rattus norv
20	2409.5	67.5	607	1	ALBU_PIG P08893 sus scrofa
21	2392	67.0	608	2	Q6WDM9_CAVPO Q6WDM9 canis porce
22	2387.5	66.9	609	1	ALBU_MERUN P07174 mus muscucu
23	2383	66.8	608	1	ALBU_MOUSE O546G4 mus muscucu
24	2383	66.8	608	2	Q6B3Z0_MOUSE Q6B3Z0 mus muscucu
25	2379.5	66.7	583	2	Q6B3Z0_MOUSE Q6B3Z0 mus muscucu
26	2379	66.7	608	2	Q8C7H3_MOUSE Q8C7H3 mus muscucu
27	2336	65.5	576	2	Q8C7C7_MOUSE Q8C7C7 mus muscucu
28	1991	55.8	417	2	Q86YG0_HUMAN Q86YG0 homo sapien
29	1870.5	52.4	396	2	Q81UK7_HUMAN Q81UK7 homo sapien
30	1562	43.8	615	1	ALBU_CHICK P19121 gallus gall
31	1295.5	36.3	527	2	Q8U7I9_SPHPU Q8U7I9 sphendon p

Result No.	Score	Query Match	Length	DB ID	Description
32	1260.5	35.3	609	1	PETA_PANTR Q28789 pan troglod
33	1256.5	35.2	609	1	PETA_HUMAN P02771 homo sapien
34	1249.5	35.0	609	1	PETA_GORGO P28050 gorilla gor
35	1242	34.8	609	2	Q8MUJ5_CANPA Q8MUJ5 canis famli
36	1242	34.8	626	2	Q8UW05_AMEMC Q8UW05 ambystoma m
37	1218.5	34.2	610	2	Q8MU76_PIG Q8MU76 sus scrofa
38	1215.5	34.1	609	2	Q5CZ21_XENTR Q5CZ21 xenopus tro
39	1207.5	33.8	607	1	ALBU2_XENLA P14872 xenopus lae
40	1201.5	33.7	607	2	Q642P7_XENLA Q642P7 xenopus lae
41	1200	33.6	609	2	PETA_HORSE P49066 equus caball
42	1183.5	33.2	608	2	Q7TSF3_MARMO Q7TSF3 marmota mon
43	1178.5	33.0	616	1	PETA_CHICK P84407 gallus gall
44	1164.5	32.6	605	1	ALBU1_XENLA P08759 xenopus lae
45	1087	30.5	624	2	Q8UW06_AMEBT Q8UW06 ambystoma t

ALIGNMENTS

RESULT 1
ALBU_HUMAN STANDARD, PRT, 609 AA.
ID ALBU_HUMAN P02768; Q95574; P04277; Q13140; Q6UXK4; Q9P157; Q9P117; Q9UH83;
AC Q9UJZ0;
DT 21-JUL-1986 (Rel. 01, Created)
DT 01-APR-1990 (Rel. 14, Last sequence update)
DT 13-SEP-2005 (Rel. 48, Last annotation update)
DE Serum albumin precursor.
GN Name=ALB;
GN ORFNames=PRO0903, PRO1708, PRO2044, PRO2619, PRO2675, UNQ6966/PRO1341;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homiidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE [GENOMIC DNA].
RX MEDLINE=86196112; PubMed=3009475;
RA Minghetti P.P., Ruffner D.E., Kuang W.J., Dennison O.E., Hawkins J.W.,
Beatlie W.G., Dugalczyk A.;
RT "Molecular structure of the human albumin gene is revealed by
RT nucleotide sequence within q11-22 of chromosome 4.";
RT J. Biol. Chem. 261:6747-6757(1986).
RL [2]
RN NUCLEOTIDE SEQUENCE [MRNA], AND VARIANT LYS-420.
RP MEDLINE=2081882; PubMed=6171778;
RX Lawn R.W., Adelman J., Bock S.C., Franke A.E., Houck C.M.,
Najarian R.C., Seeburg P.H., Wilson K.L.;
RT "The sequence of human serum albumin cDNA and its expression in E.
RT coli.";
RL Nucleic Acids Res. 9:6103-6114(1981).
RN [3]
RP NUCLEOTIDE SEQUENCE [MRNA], AND VARIANT GLY-121.
RX MEDLINE=82105994; PubMed=6275391;
RA Dugalczyk A., Law S.W., Dennison O.E.;
RT "Nucleotide sequence and the encoded amino acids of human serum
RT albumin mRNA.";
RL Proc. Natl. Acad. Sci. U.S.A. 79:71-75(1982).
RN [4]
RP NUCLEOTIDE SEQUENCE [MRNA].
RC TISSUE=Liver;
RA Yang S., Zhang R.A., Qi Z.W., Yuan Z.Y.;
RT "Human serum albumin." to the EMBL/GenBank/DBJ databases.
RL Submitted (SEP-1999) to the EMBL/GenBank/DBJ databases.
RN [5]
RP NUCLEOTIDE SEQUENCE [MRNA], AND VARIANT HIROSHIMA-1 LYS-378.
RA Hwang M.C., Wu H.T.;
RT "The cDNA sequences of human serum albumin.";
RL Submitted (AUG-2002) to the EMBL/GenBank/DBJ databases.
RN [6]
RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RC TISSUE=Fetal liver;
RX MEDLINE=21376145; PubMed=11483580; DOI=10.1101/gr.175501;

RA Yu Y., Zhang C., Zhou G., Wu S., Qu X., Wei H., Xing G., Dong C.,
 RA Zhai Y., Man J., Ouyang S., Li L., Zhang S., Zhou K., Zhang Y., Wu C.,
 RA He F.;
 RT "Gene expression profiling in human fetal liver and identification of
 RT tissue- and developmental-stage-specific genes through complicated
 RT expression profiles and efficient cloning of full-length cDNAs.";
 RL Genome Res. 11:1392-1403(2001).
 RN [7]
 RN NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
 RP TISSUE=Liver and Skeletal muscle;
 RC MEDLINE=22288257; PubMed=12477932; DOI=10.1073/pnae.242603899;
 RX Klausberg R.L., Feingold E.A., Grose L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shemmen C.M., Schaller G.D.,
 RA Altschul S.F., Zeeberg B., Buettow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
 RA Datchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldi M.F., Casavant T.L., Schetz T.E.,
 RA Brownstein M.U., Usdin T.B., Toshiyuki S., Carninci P., Frange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullighy S.J.,
 RA Bosak S.A., McGwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Villalón D.K., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Villalón D.K., Murray D.M., Sodergren B.J., Lu X., Gibbs R.A.,
 RA Fahy J., Heiton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Boulard G.G.,
 RA Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butcherfield Y.S.N., Krzywinski M.I., Skalska U., Smalins D.B.,
 RA Scherch A., Schein J.E., Jones S.J.M., Marz M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences.";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 RN [8]
 RN PROTEIN SEQUENCE OF 25-609.
 RP MEDLINE=76187907; PubMed=12255573; DOI=10.1016/0014-5793(75)80242-0;
 RX Meloun B., Moravek L., Kostka V.;
 RA "Complete amino acid sequence of human serum albumin.";
 RT FEBS Lett. 58:134-137(1975).
 RN [9]
 RN PROTEIN SEQUENCE OF 25-609.
 RP Brown J.R., Shockley P., Behrens P.Q.;
 RA (Iin) Bing D.H. (eds.);
 RL The chemistry and physiology of the human plasma proteins, pp.23-40,
 RL Pergamon Press, New York (1979).
 RN [10]
 RN NUCLEOTIDE SEQUENCE OF 1-455.
 RP TISSUE=Liver;
 RC Menaya J., Parrilla R., Ayuso M.S.;
 RL Submitted (MAR-1995) to the EMBL/GenBank/DBJ databases.
 RN [11]
 RN NUCLEOTIDE SEQUENCE OF 1-26.
 RP MEDLINE=86140099; PubMed=2419329;
 RX Uraño Y., Watanabe K., Sakai M., Tamaoki T.;
 RA "The human albumin gene. Characterization of the 5' and 3' flanking
 RT regions and the polymorphic gene transcripts.";
 RL J. Biol. Chem. 261:3244-3251(1986).
 RN [12]
 RN NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA] OF 1-167.
 RP MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003;
 RX Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D.T., Brush J.,
 RA Chen J., Chow B., Chui C., Crowley C., Cutrell B., Deuel B., Dowd P.,
 RA Eaton D., Foster J.S., Grimaldi C., Gu Q., Hase P.E., Helens S.,
 RA Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J.,
 RA Lewis L., Liao D., Mark M.R., Robbie E., Sanchez C., Schoenfeld J.,
 RA Seshagiri S., Simmons L., Singh J., Smith V., Stinson J., Vagts A.,
 RA Vandenberg K.L., Watanabe C., Wieland D., Woods K., Xie M.-H.,
 RA Yamanura D.G., Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A.D.,
 RA Wood W.I., Godowski P.J., Gray A.M.;
 RT "The secreted protein discovery initiative (SPDI), a large-scale
 RT effort to identify novel human secreted and transmembrane proteins: a
 RT bioinformatics assessment.";
 RL Genome Res. 13:2265-2270(2003).
 RN [13]
 RP PROTEIN SEQUENCE OF 222-229.
 RN [14]
 RN MEDLINE=76257808; PubMed=955075; DOI=10.1016/0014-5793(76)80496-6;
 RA Walker J.E.;
 RT "Lysine residue 199 of human serum albumin is modified by
 RT acetylsalicylic acid.";
 RL FEBS Lett. 66:173-175 (1976).
 RN [14]
 RN PROTEIN SEQUENCE OF 25-44 AND 480-499.
 RP TISSUE=Heart;
 RC MEDLINE=95203287; PubMed=7895732;
 RX Corbett J.M., Wheeler C.H., Baker C.S., Yacoub M.H., Dunn M.J.;
 RA "The human myocardial two-dimensional gel protein database: update
 RT 1994.";
 RL Electrophoresis 15:1459-1465(1994).
 RN [15]
 RN PROTEIN SEQUENCE OF 166-174.
 RP MEDLINE=86242180; PubMed=3087352;
 RX Mogard M.H., Kobayashi R., Chen C.F., Lee T.D., Reeve J.R. Jr.,
 RA Shively J.E., Walsh J.H.;
 RT "The amino acid sequence of kinetensin, a novel peptide isolated from
 RT peptic-treated human plasma: homology with human serum albumin,
 RT neurotensin and angiotensin.";
 RL Biochem. Biophys. Res. Commun. 136:983-988(1986).
 RN [16]
 RN PROTEIN SEQUENCE OF 166-174.
 RP MEDLINE=87194805; PubMed=2437111;
 RX Carraway R.E., Mitra S.P., Cochran D.E.;
 RA "Structure of a biologically active neurotensin-related peptide
 RT obtained from peptic-treated albumin(s).";
 RL J. Biol. Chem. 262:5968-5973(1987).
 RN [17]
 RN DISULFIDE BONDS.
 RP Saber M.A., Stockbauer P., Moravek L., Meloun B.;
 RT "Disulfide bonds in human serum albumin.";
 RL Collect. Czech. Chem. Commun. 42:564-579(1977).
 RN [18]
 RN BILIRUBIN-BINDING SITE.
 RP MEDLINE=78186630; PubMed=656055;
 RX Jacobsen C.;
 RA "Lysine residue 240 of human serum albumin is involved in high-
 RT affinity binding of bilirubin.";
 RL Biochem. J. 171:453-459(1978).
 RN [19]
 RN VARIANT CANTERBURY ASN-337.
 RP MEDLINE=87157744; PubMed=3828358; DOI=10.1016/0167-4838(87)90088-4;
 RX Brennan S.O., Herbert P.;
 RA "Albumin Canterbury (313 Lys-->Asn). A point mutation in the second
 RT domain of serum albumin.";
 RL Biochim. Biophys. Acta 912:191-197(1987).
 RN [20]
 RN VARIANT NASKAPI/MERSIN GLU-396 AND MEXICO GLY-574.
 RP MEDLINE=87260818; PubMed=3474609;
 RX Takahashi N., Takahashi Y., Blumberg B.S., Putnam F.W.;
 RA "Amino acid substitutions in genetic variants of human serum albumin
 RT and in sequences inferred from molecular cloning.";
 RL Proc. Natl. Acad. Sci. U.S.A. 84:4413-4417(1987).
 RN [21]
 RN VARIANT NAGASAKI-3 GLN-27 YANOMAMA-2 GLU-396; NAGASAKI-2 ASN-399 AND
 RP MAKU GLU-565.
 RP MEDLINE=86068523; PubMed=3479777;
 RX Takahashi N., Takahashi Y., Isebe T., Putnam F.W., Fujita M.,
 RA Satoh C., Neel J.V.;
 RT "Amino acid substitutions in inherited albumin variants from
 RT American and Japanese populations.";
 RL Proc. Natl. Acad. Sci. U.S.A. 84:8001-8005(1987).
 RN [22]
 RN VARIANT FUKUOKA-2 HIS-23; CHRISTCHURCH/HONOLULU-2 GLN-24; TAGLIACCOZZO
 RP ASN-337 AND ALBUMIN B/OSAKA-2/PHNOM PHEN LYS-594.
 RP MEDLINE=89098947; PubMed=2911589;
 RX Arai K., Iehioka N., Huse K., Madison J., Putnam F.W.;
 RA "Identical structural changes in inherited albumin variants from
 RT different populations.";
 RL Proc. Natl. Acad. Sci. U.S.A. 86:434-438(1989).
 RN [23]

RP VARIANTS HONOLULU-2 GIN-24; NAGASAKI-1 GUY-293; HIROSHIMA-1 LYS-378;
RP TOCHIGI LYS-400; HIROSHIMA-2 LYS-406 AND OSAKA-2 LYS-594.

Query Match 87.1%; Score 3108; DB 1; Length 609;
Best Local Similarity 100.0%; Pred. No. 6.7e-190;
Matches 586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	89	RDANKSEVAHRRPKDLSGEMNFKALVLIAPAOYLQCCPEFDHVKLVNEVTEPAKTCVADBSA	148
DB	24	RDANKSEVAHRRPKDLSGEMNFKALVLIAPAOYLQCCPEFDHVKLVNEVTEPAKTCVADBSA	83
QY	149	ENCDSKSLHTLFDKLCCTVATLRETYGEMADCCAKOEPERNRCEFLQHKDNPMLPRLVRE	208
DB	84	ENCDSKSLHTLFDKLCCTVATLRETYGEMADCCAKOEPERNRCEFLQHKDNPMLPRLVRE	143
QY	209	VDMCTAFHNDNETFLKCYLYEYIARRHPYFAPPELLFPAKRYKAAFTCCQAAADKAACTLL	268
DB	144	VDMCTAFHNDNETFLKCYLYEYIARRHPYFAPPELLFPAKRYKAAFTCCQAAADKAACTLL	203
QY	269	PRLDELRLDGGKASAKORLKCASLQKFGERRAFKAAVAARLSQRFPKAEFAVSKLVTDLT	328
DB	204	PRLDELRLDGGKASAKORLKCASLQKFGERRAFKAAVAARLSQRFPKAEFAVSKLVTDLT	263
QY	329	KVHTCCGHDLLECADDRADLAKYICENODSISKLKCECCERPLLEKSHCIAREVNDMP	388
DB	264	KVHTCCGHDLLECADDRADLAKYICENODSISKLKCECCERPLLEKSHCIAREVNDMP	323
QY	389	ADLPSLAADPFVSKKVCNKVYAEAKDVFGLGMFLYEYARRHPDYSVLLRLAKTYETTLTK	448
DB	324	ADLPSLAADPFVSKKVCNKVYAEAKDVFGLGMFLYEYARRHPDYSVLLRLAKTYETTLTK	383
QY	449	CCAADPHRCYAKVDFEFGYLVBEPPONLIKONCELFEOGLEYKFOVALLVRYTKVPOVS	508
DB	384	CCAADPHRCYAKVDFEFGYLVBEPPONLIKONCELFEOGLEYKFOVALLVRYTKVPOVS	443
QY	509	TPTLVEVSRNLGKVSCKCKHPEAKRMPCAEDYLSVLIHQLCVLEKTPVSDRVTCCCTE	568
DB	444	TPTLVEVSRNLGKVSCKCKHPEAKRMPCAEDYLSVLIHQLCVLEKTPVSDRVTCCCTE	503
QY	569	SLVNRPPCSALEVDETYVPKPEFNAETFTFHADICTLSKERQIKKQYALVELVYKHKPKA	628
DB	504	SLVNRPPCSALEVDETYVPKPEFNAETFTFHADICTLSKERQIKKQYALVELVYKHKPKA	563
QY	629	TKEQKAVVMDPFAAFVCKCKADDKETCFABEGKLVVAASQAALGI	674
DB	564	TKEQKAVVMDPFAAFVCKCKADDKETCFABEGKLVVAASQAALGI	609

RESULT 2
 ID 0645G4_HUMAN PRELIMINARY; PRT; 609 AA.
 AC 0645G4;
 DT 10-MAY-2005 (TrEMBLrel. 30, Created)
 DT 10-MAY-2005 (TrEMBLrel. 30, Last sequence update)
 DT 10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
 OS Homo sapiens (human).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Butheria; Euarchontoglires; Primates; Catarrhini; Homiidae;
 OC Homo.
 NCBI_TaxID=9606;
 RN NCLEOTIDE SEQUENCE.
 RP RISSUB=Liver;
 RA Yu Z., Fu Y.;
 RT "High Expression HSA in Pichia for Pharmaceutical Use."
 RL Submitted (Aug-2004) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AY28024; AAU21642.1; -; mRNA.
 DR SQUENCE 609 AA; 69366 MW; F88F61DD242E818 CRC64;

Query Match 87.1%; Score 3108; DB 2; Length 609;
 Best Local Similarity 100.0%; Pred. No. 6.7e-190;
 Matches 586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 89 RDANKSEVAHRRPKDLSGEMNFKALVLIAPAOYLQCCPEFDHVKLVNEVTEPAKTCVADBSA 148

DB 24 RDANKSEVAHRRPKDLSGEMNFKALVLIAPAOYLQCCPEFDHVKLVNEVTEPAKTCVADBSA 83

QY 149 ENCDSKSLHTLFDKLCCTVATLRETYGEMADCCAKOEPERNRCEFLQHKDNPMLPRLVRE 208

DB 84 ENCDSKSLHTLFDKLCCTVATLRETYGEMADCCAKOEPERNRCEFLQHKDNPMLPRLVRE 143

QY 209 VDMCTAFHNDNETFLKCYLYEYIARRHPYFAPPELLFPAKRYKAAFTCCQAAADKAACTLL 268

DB 144 VDMCTAFHNDNETFLKCYLYEYIARRHPYFAPPELLFPAKRYKAAFTCCQAAADKAACTLL 203

QY 269 PRLDELRLDGGKASAKORLKCASLQKFGERRAFKAAVAARLSQRFPKAEFAVSKLVTDLT 328

DB 204 PRLDELRLDGGKASAKORLKCASLQKFGERRAFKAAVAARLSQRFPKAEFAVSKLVTDLT 263

QY 329 KVHTCCGHDLLECADDRADLAKYICENODSISKLKCECCERPLLEKSHCIAREVNDMP 388

DB 264 KVHTCCGHDLLECADDRADLAKYICENODSISKLKCECCERPLLEKSHCIAREVNDMP 323

QY 389 ADLPSLAADPFVSKKVCNKVYAEAKDVFGLGMFLYEYARRHPDYSVLLRLAKTYETTLTK 448

DB 324 ADLPSLAADPFVSKKVCNKVYAEAKDVFGLGMFLYEYARRHPDYSVLLRLAKTYETTLTK 383

QY 449 CCAADPHRCYAKVDFEFGYLVBEPPONLIKONCELFEOGLEYKFOVALLVRYTKVPOVS 508

DB 384 CCAADPHRCYAKVDFEFGYLVBEPPONLIKONCELFEOGLEYKFOVALLVRYTKVPOVS 443

QY 509 TPTLVEVSRNLGKVSCKCKHPEAKRMPCAEDYLSVLIHQLCVLEKTPVSDRVTCCCTE 568

DB 444 TPTLVEVSRNLGKVSCKCKHPEAKRMPCAEDYLSVLIHQLCVLEKTPVSDRVTCCCTE 503

QY 569 SLVNRPPCSALEVDETYVPKPEFNAETFTFHADICTLSKERQIKKQYALVELVYKHKPKA 628

DB 504 SLVNRPPCSALEVDETYVPKPEFNAETFTFHADICTLSKERQIKKQYALVELVYKHKPKA 563

RESULT 3
 ID 05NVH5_PONY PRELIMINARY; PRT; 609 AA.
 AC 05NVH5;
 DT 01-FEB-2005 (TrEMBLrel. 29, Created)
 DT 01-FEB-2005 (TrEMBLrel. 29, Last sequence update)
 DT 01-FEB-2005 (TrEMBLrel. 29, Last annotation update)
 DE Hypothetical protein DKFZp459F2310.
 GN Name=DKFZp459F2310;
 OS Pongo pygmaeus (Orangutan).
 OC Eukaryota; Metazoa; Chordata; Granulate; Vertebrata; Euteleostomi;
 OC Mammalia; Butheria; Euarchontoglires; Primates; Catarrhini; Homiidae;
 OC Pongo.
 NCBI_TaxID=9600;
 RN NCLEOTIDE SEQUENCE.
 RP TISSUE=Cortex;
 RG The German CDNA Consortium;
 RA Wambutt R., Heubner D., Mewes H.W., Weil B., Amid C., Osanger A.,
 RA Robo G., Han M., Wiemann S.;
 RL Submitted (NOV-2004) to the EMBL/GenBank/DBJ databases.
 DR EMBL; CR926060; CAI29688.1; -; mRNA.
 DR SMR; 05NVH5; 26-608.
 DR GO; GO:0005615; C:extracellular space; IEA.
 DR GO; GO:0005386; F:carrier activity; IEA.
 DR GO; GO:0006810; P:transport; IEA.
 DR InterPro; IPR001703; AlphaFoldprot.
 DR Pfam; PF00273; Serum_albumin; 3.
 DR PRINTS; PR00803; AFTOPROTEIN.
 DR PRINTS; PR00802; SERUMALBUMIN.

DR ProDom; PD002486; Serum albumin; 1.
 DR SMART; SM00103; ALBUMIN; 3.
 DR PROSITE; PS00212; ALBUMIN; 3.
 KW Hypothetical protein.
 SQ SEQUENCE 609 AA; 69366 MW; F88FF61DD2428B18 CRC64;

Query Match 87.1%; Score 3108; DB 2; Length 609;
 Best Local Similarity 100.0%; Pred. No. 6.7e-190;
 Matches 586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 89 RAHAKSEVAHRRPKDLDGSEENFKALVLIAPAOYLQCCPFEDHVKLVNVEVTEFAKTCVADBSA 148
 DB 24 RAHAKSEVAHRRPKDLDGSEENFKALVLIAPAOYLQCCPFEDHVKLVNVEVTEFAKTCVADBSA 83
 QY 149 ENCDKSLHTLFGDKLCTVAITLRETYGEMADCCAKOEPERNECFLOHKDNDPMLPRLVPE 208
 DB 84 ENCDKSLHTLFGDKLCTVAITLRETYGEMADCCAKOEPERNECFLOHKDNDPMLPRLVPE 143
 QY 209 VDVMCSTAFHNDNEETFLKYLVEIARRHRYFYAPPELLFAKRYKAAFTCCQAADKAACL 268
 DB 144 VDVMCSTAFHNDNEETFLKYLVEIARRHRYFYAPPELLFAKRYKAAFTCCQAADKAACL 203
 QY 269 PKLDELRLDRBGKASAKORIKCASLQKFGERRAKAVAVARLSQRFPAKFAEAVSKLVTDLT 328
 DB 204 PKLDELRLDRBGKASAKORIKCASLQKFGERRAKAVAVARLSQRFPAKFAEAVSKLVTDLT 263
 QY 329 KYHTCCGHDLLFCADDRADIAKYICENODSISSKLKECCERPLEKSHCIAEVENDEMP 388
 DB 264 KYHTCCGHDLLFCADDRADIAKYICENODSISSKLKECCERPLEKSHCIAEVENDEMP 323
 QY 389 ADLPSLAADFVBSKDVCKNVAEAKDVFGLMFLYEYARRHDPYSVLLRLAKTYETLLEK 448
 DB 324 ADLPSLAADFVBSKDVCKNVAEAKDVFGLMFLYEYARRHDPYSVLLRLAKTYETLLEK 383
 QY 449 CCAAADPHRCYAKVDFEPRVLEBPONLIKONCEIFBQIGSEYKFOALLVRYTKKVPQVS 508
 DB 384 CCAAADPHRCYAKVDFEPRVLEBPONLIKONCEIFBQIGSEYKFOALLVRYTKKVPQVS 443
 QY 509 TPTLVEVSNRLGKVSCKCKHPBAKMPGABDYLAVLNQLCVLHNRTPVSDRVTKCCTE 568
 DB 444 TPTLVEVSNRLGKVSCKCKHPBAKMPGABDYLAVLNQLCVLHNRTPVSDRVTKCCTE 503
 QY 569 SLVNRPPCFSALEVDDETYVPEFNAETFTFHADICTLSEKERQIKKQALVELVGRKPKA 628
 DB 504 SLVNRPPCFSALEVDDETYVPEFNAETFTFHADICTLSEKERQIKKQALVELVGRKPKA 563
 QY 629 TTEQLKAVVDDFAAFVFKCCAKADDEKTCFAEBGKKLVAASQAALGI 674
 DB 564 TTEQLKAVVDDFAAFVFKCCAKADDEKTCFAEBGKKLVAASQAALGI 609

RESULT 4
 Q66DN5 HUMAN PRELIMINARY; PRT; 609 AA.

AC 068DN5; (1)
 DT 25-OCT-2004 (TrEMBLrel. 28, Created)
 DT 25-OCT-2004 (TrEMBLrel. 28, last sequence update)
 DT 25-OCT-2004 (TrEMBLrel. 28, last annotation update)
 DE Hypothetical protein DKFZp779N1935.
 GN Name=DKFZp779N1935;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homiidae;
 OC Homo.
 OX NCBI_TaxID=9606;
 RN (1)
 RP NUCLEOTIDE SEQUENCE.
 RC TISSUE=Liver;
 RG The German cDNA Consortium;
 RA Bloeker H., Boecher M., Brandt P., Mewes H.W., Weil B., Amid C.,
 RA Osanger A., Pobo G., Han M., Wiemann S.,
 RL Submitted (Aug-2004) to the EMBL/GenBank/DBJ databases.
 DR EMBL; CR749331; CAH18185.1; -; mRNA.

DR SMR; Q66DN5; 26-608.
 DR GO; GO:0005615; C:extracellular space; IEA.
 DR GO; GO:0005386; F:carrier activity; IEA.
 DR GO; GO:0006810; P:transport; IEA.
 DR InterPro; IPR001703; Alphafetoprot.
 DR InterPro; IPR000264; Serum albumin.
 DR Pfam; PF00273; Serum albumin; 3.
 DR PRINTS; PR00803; AFTOPROTEIN.
 DR PRINTS; PR00802; SERUMALBUMIN.
 DR ProDom; PD002486; Serum albumin.
 DR SMART; SM00103; ALBUMIN; 3.
 DR PROSITE; PS00212; ALBUMIN; 3.
 KW Hypothetical protein.
 SQ SEQUENCE 609 AA; 69402 MW; 3BA3AF17BF99E94 CRC64;

Query Match 86.4%; Score 3084; DB 2; Length 609;
 Best Local Similarity 99.1%; Pred. No. 2.3e-188;
 Matches 581; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 89 RAHAKSEVAHRRPKDLDGSEENFKALVLIAPAOYLQCCPFEDHVKLVNVEVTEFAKTCVADBSA 148
 DB 24 RAHAKSEVAHRRPKDLDGSEENFKALVLIAPAOYLQCCPFEDHVKLVNVEVTEFAKTCVADBSA 83
 QY 149 ENCDKSLHTLFGDKLCTVAITLRETYGEMADCCAKOEPERNECFLOHKDNDPMLPRLVPE 208
 DB 84 ENCDKSLHTLFGDKLCTVAITLRETYGEMADCCAKOEPERNECFLOHKDNDPMLPRLVPE 143
 QY 209 VDVMCSTAFHNDNEETFLKYLVEIARRHRYFYAPPELLFAKRYKAAFTCCQAADKAACL 268
 DB 144 VDVMCSTAFHNDNEETFLKYLVEIARRHRYFYAPPELLFAKRYKAAFTCCQAADKAACL 203
 QY 269 PKLDELRLDRBGKASAKORIKCASLQKFGERRAKAVAVARLSQRFPAKFAEAVSKLVTDLT 328
 DB 204 PKLDELRLDRBGKASAKORIKCASLQKFGERRAKAVAVARLSQRFPAKFAEAVSKLVTDLT 263
 QY 329 KYHTCCGHDLLFCADDRADIAKYICENODSISSKLKECCERPLEKSHCIAEVENDEMP 388
 DB 264 KYHTCCGHDLLFCADDRADIAKYICENODSISSKLKECCERPLEKSHCIAEVENDEMP 323
 QY 389 ADLPSLAADFVBSKDVCKNVAEAKDVFGLMFLYEYARRHDPYSVLLRLAKTYETLLEK 448
 DB 324 ADLPSLAADFVBSKDVCKNVAEAKDVFGLMFLYEYARRHDPYSVLLRLAKTYETLLEK 383
 QY 449 CCAAADPHRCYAKVDFEPRVLEBPONLIKONCEIFBQIGSEYKFOALLVRYTKKVPQVS 508
 DB 384 CCAAADPHRCYAKVDFEPRVLEBPONLIKONCEIFBQIGSEYKFOALLVRYTKKVPQVS 443
 QY 509 TPTLVEVSNRLGKVSCKCKHPBAKMPGABDYLAVLNQLCVLHNRTPVSDRVTKCCTE 568
 DB 444 TPTLVEVSNRLGKVSCKCKHPBAKMPGABDYLAVLNQLCVLHNRTPVSDRVTKCCTE 503
 QY 569 SLVNRPPCFSALEVDDETYVPEFNAETFTFHADICTLSEKERQIKKQALVELVGRKPKA 628
 DB 504 SLVNRPPCFSALEVDDETYVPEFNAETFTFHADICTLSEKERQIKKQALVELVGRKPKA 563
 QY 629 TTEQLKAVVDDFAAFVFKCCAKADDEKTCFAEBGKKLVAASQAALGI 674
 DB 564 TTEQLKAVVDDFAAFVFKCCAKADDEKTCFAEBGKKLVAASQAALGI 609

RESULT 5
 Q56G89 HUMAN PRELIMINARY; PRT; 609 AA.

AC 056G89; (1)
 DT 10-MAY-2005 (TrEMBLrel. 30, Created)
 DT 10-MAY-2005 (TrEMBLrel. 30, last sequence update)
 DT 10-MAY-2005 (TrEMBLrel. 30, last annotation update)
 DE Serum albumin.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homiidae;
 OC Homo.
 OX NCBI_TaxID=9606;

RN [1]
 NCLEBOTIDE SEQUENCE.
 RA Li H., Zhang Y., Li X., Yang R., Tang S., Zhang M., Hua S.;
 RT "Homo sapiens serum albumin (HSA) cDNA sequence."
 RT Submitted (MAR-2005) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AY960291; AA: X63425.1; -; mRNA.
 SO SEQUENCE 609 AA; 69084 MW; 39B0CB81217A99C CRC64;
 Query Match 86.1%; Score 3073; DB 2; Length 609;
 Best Local Similarity 99.1%; Pred. No. 1.1e-187;
 Matches 581; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 89 RDAHKSEVVAHREFKDLGSENNKALVLIAPAYQLQCCPEBHVKLVNEVTEPAKTCVADESA 148
 DB 24 RDAHKSEVVAHREFKDLGSENNKALVLIAPAYQLQCCPEBHVKLVNEVTEPAKTCVADESA 83
 QY 149 ENCDKSIHLTIFGDKLCTVAATLRRTYEGMADCCAKQKQEBRNCEFLQHKDNDPMLPRLVPRP 208
 DB 84 ENCDKSIHLTIFGDKLCTVAATLRRTYEGMADCCAKQKQEBRNCEFLQHKDNDPMLPRLVPRP 143
 QY 209 VDVWCTAFHNDNEETFLKCYLYEYIARRRHPYVYABELFFPAKRYKAATFTECCQAADKAACL 268
 DB 144 VDVWCTAFHNDNEETFLKCYLYEYIARRRHPYVYABELFFPAKRYKAATFTECCQAADKAACL 203
 QY 269 PKLDELDRDGGKASSAKORLKCASLQKGERAFKAWAVARLSORPPKAPFAVSGLVTDLT 328
 DB 204 PKLDELDRDGGKASSAKORLKCASLQKGERAFKAWAVARLSORPPKAPFAVSGLVTDLT 263
 QY 329 KVHTECGHDLLECGADRDADLAKYTCENODSISSKLKECCERPLLEKSHCIABVENDEMP 388
 DB 264 KVHTECGHDLLECGADRDADLAKYTCENODSISSKLKECCERPLLEKSHCIABVENDEMP 323
 QY 389 ADLPSLAADPVEKSKDYCKNYAEAKDVFGLGFLVEYARRRHPDYSVVLRLAKTYETTLK 448
 DB 324 ADLPSLAADPVEKSKDYCKNYAEAKDVFGLGFLVEYARRRHPDYSVVLRLAKTYETTLK 383
 QY 449 CCAAADPHECYAVFDEFPKPLVEBPONLIKONCELEFQLEGEYKQNALVRYTKKVPQVS 508
 DB 384 CCAAADPHECYAVFDEFPKPLVEBPONLIKONCELEFQLEGEYKQNALVRYTKKVPQVS 443
 QY 509 TPTLVEVSRNIGKVGSKCCGHPKAKMPCAEDYLSTVLANQLCVLHKETPVSDRYTKCCTE 568
 DB 444 TPTLVEVSRNIGKVGSKCCGHPKAKMPCAEDYLSTVLANQLCVLHKETPVSDRYTKCCTE 503
 QY 569 SLVNRRCFSALEVDETVYVPEKFNAAETFTPHADICTLSEKERQIKKQTAVALVELVKHKPKA 628
 DB 504 SLVNRRCFSALEVDETVYVPEKFNAAETFTPHADICTLSEKERQIKKQTAVALVELVKHKPKA 563
 QY 629 TKEQLKAVMDPFAAFVKECKCKADDKETCFABEGRKQVAASQAALGL 674
 DB 564 TKEQLKAVMDPFAAFVKECKCKADDKETCFABEGRKQVAASQAALGL 609

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.P., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.U., Usdin T.B., Toshiyuki S., Carrinci P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.U., Malek J.A., Gumarate P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Huliyk S.W.,
 RA Vallalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahy J., Helton E., Kettleman M., Madan A., Rodrigues S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butlerfield Y.S.N., Krzywiński M.I., Skalska U., Smalins D.E.,
 RA Schnerch A., Schein J.E., Jones S.J.W., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 and mouse cDNA sequences";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
 RN [2]
 RP NCLEBOTIDE SEQUENCE.
 RA Strausberg R.;
 RL Submitted (NOV-2002) to the EMBL/GenBank/DBJ databases.
 DR EMBL: BC039235; AA: H39235.1; -; mRNA.
 SO SEQUENCE 627 AA; 71704 MW; 271C97408D7EDD04 CRC64;
 Query Match 85.9%; Score 3066; DB 2; Length 627;
 Best Local Similarity 98.5%; Pred. No. 3.3e-187;
 Matches 577; Conservative 1; Mismatches 8; Indels 0; Gaps 0;

QY 89 RDAHKSEVVAHREFKDLGSENNKALVLIAPAYQLQCCPEBHVKLVNEVTEPAKTCVADESA 148
 DB 24 RDAHKSEVVAHREFKDLGSENNKALVLIAPAYQLQCCPEBHVKLVNEVTEPAKTCVADESA 83
 QY 149 ENCDKSIHLTIFGDKLCTVAATLRRTYEGMADCCAKQKQEBRNCEFLQHKDNDPMLPRLVPRP 208
 DB 84 ENCDKSIHLTIFGDKLCTVAATLRRTYEGMADCCAKQKQEBRNCEFLQHKDNDPMLPRLVPRP 143
 QY 209 VDVWCTAFHNDNEETFLKCYLYEYIARRRHPYVYABELFFPAKRYKAATFTECCQAADKAACL 268
 DB 144 VDVWCTAFHNDNEETFLKCYLYEYIARRRHPYVYABELFFPAKRYKAATFTECCQAADKAACL 203
 QY 269 PKLDELDRDGGKASSAKORLKCASLQKGERAFKAWAVARLSORPPKAPFAVSGLVTDLT 328
 DB 204 PKLDELDRDGGKASSAKORLKCASLQKGERAFKAWAVARLSORPPKAPFAVSGLVTDLT 263
 QY 329 KVHTECGHDLLECGADRDADLAKYTCENODSISSKLKECCERPLLEKSHCIABVENDEMP 388
 DB 264 KVHTECGHDLLECGADRDADLAKYTCENODSISSKLKECCERPLLEKSHCIABVENDEMP 323
 QY 389 ADLPSLAADPVEKSKDYCKNYAEAKDVFGLGFLVEYARRRHPDYSVVLRLAKTYETTLK 448
 DB 324 ADLPSLAADPVEKSKDYCKNYAEAKDVFGLGFLVEYARRRHPDYSVVLRLAKTYETTLK 383
 QY 449 CCAAADPHECYAVFDEFPKPLVEBPONLIKONCELEFQLEGEYKQNALVRYTKKVPQVS 508
 DB 384 CCAAADPHECYAVFDEFPKPLVEBPONLIKONCELEFQLEGEYKQNALVRYTKKVPQVS 443
 QY 509 TPTLVEVSRNIGKVGSKCCGHPKAKMPCAEDYLSTVLANQLCVLHKETPVSDRYTKCCTE 568
 DB 444 TPTLVEVSRNIGKVGSKCCGHPKAKMPCAEDYLSTVLANQLCVLHKETPVSDRYTKCCTE 503
 QY 569 SLVNRRCFSALEVDETVYVPEKFNAAETFTPHADICTLSEKERQIKKQTAVALVELVKHKPKA 628
 DB 504 SLVNRRCFSALEVDETVYVPEKFNAAETFTPHADICTLSEKERQIKKQTAVALVELVKHKPKA 563
 QY 629 TKEQLKAVMDPFAAFVKECKCKADDKETCFABEGRKQVAASQAALGL 674
 DB 564 TKEQLKAVMDPFAAFVKECKCKADDKETCFABEGRKQVAASQAALGL 609

RESULT 7
 ALBU_MACMU STANDARD; PRT; 600 AA.
 ID ALBU_MACMU

AC Q28522; 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 10-MAY-2005 (Rel. 47, Last annotation update)
 DE Serum albumin precursor (Fragment).
 GN Name=ALB;
 OS Macaca mulatta (Rhesus macaque).
 OC Eukaryota; Metazoa; Chordata; Cranialia; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
 OC Cercopithecoidea; Cercopithecinae; Macaca.
 OX NCBI_TaxID=9544;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RA MEDLINE=93211911; PubMed=8460152;
 RA Watkins S.A., Sakamoto Y., Madison J.M., Davis E.M., Smith D.G.,
 RA Dmulet J., Putnam F.W.;
 RT "cDNA and protein sequence of polymorphic macaque albumins that differ
 in bilirubin binding.";
 RL Proc. Natl. Acad. Sci. U.S.A. 90:2409-2413(1993).
 CC -1- FUNCTION: Serum albumin, the main protein of plasma, has a good
 binding capacity for water, Ca(2+), Na(+), K(+), fatty acids,
 hormones, bilirubin and drugs. Its main function is the regulation
 of the colloidal osmotic pressure of blood.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: Plasma.
 CC -1- SIMILARITY: Belongs to the ALB/AFP/VDB family.
 CC -1- SIMILARITY: Contains 3 albumin domains.
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 between the Swiss Institute of Bioinformatics and the EMBL outstation -
 the European Bioinformatics Institute. There are no restrictions on its
 use as long as its content is in no way modified and this statement is not
 removed.

 DR EMBL: M90463; AAA36906.1; --; mRNA.
 DR PIR: A47391; A47391.
 DR HSSP: P02768; 1E7B.
 DR SMR: Q28522; 19-600.
 DR InterPro: IPR001703; Alphafetoprot.
 DR InterPro: IPR000264; Serum albumin.
 DR Pfam: PF00273; Serum albumin_3.
 DR PRINTS: PR00803; AFETOPROTEIN.
 DR PRODOM: PD002486; SERDALBUMIN.
 DR DR SMART: SMO0103; ALBUMIN; 3.
 DR SMART: PS00212; ALBUMIN; 3.
 KW Copper; Lipid-binding; Metal-binding; Repeat; Signal.
 FT SIGNAL 10
 FT PROPEP 16
 FT CHAIN 17 600
 FT DOMAIN 17 197
 FT DOMAIN 204 389
 FT DOMAIN 396 587
 FT METAL 19 19
 FT BINDING 256 256
 FT DISULFID 69 78
 FT DISULFID 91 107
 FT DISULFID 106 117
 FT DISULFID 140 185
 FT DISULFID 184 193
 FT DISULFID 216 262
 FT DISULFID 261 295
 FT DISULFID 281 295
 FT DISULFID 294 305
 FT DISULFID 332 377
 FT DISULFID 376 385
 FT DISULFID 408 454
 FT DISULFID 453 464
 FT DISULFID 477 493
 FT DISULFID 492 503
 FT DISULFID 530 575
 FT DISULFID 574 583
 FT NON_TER 1

SQ SEQUENCE 600 AA; 67881 MW; E45C871A670E740B CRC64;
 Query Match 82.6%; Score 2947; DB 1; Length 600;
 Best Local Similarity 93.5%; Pred. No. 1.2e-179;
 Matches 546; Conservative 23; Mismatches 15; Indels 0; Gaps 0;
 QY 89 RAHNSEVANRFRKDYGEENFKALVLIAPAQYIQGPFDPDKLVNVEYFAKTCVADBSA 148
 DB 16 RPTNHSKSEVNRKDKDGEHFKLVVAFSQYIQGPFDPDKLVNVEYFAKTCVADBSA 75
 QY 149 ENCKDSIHTLFGDKICTVAATLRETYGEMADCCAKQEPREKCFDGHKDDNPVPLVLRPE 208
 DB 76 ENCKDSLHTLFGDKICTVAATLRETYGEMADCCAKQEPREKCFDGHKDDNPVPLVLRPE 135
 QY 209 VDMVCTAFHNDNEETPLKTYLIEIARRHPYFVAPPELLFFAKRYKAAFTTECCQADKAACTL 268
 DB 136 VDMVCTAFHNDNEATLTKYLVVARRHPYFVAPPELLFFAKRYKAAFAECCQADKAACTL 195
 QY 269 PFLDLRDEGKASAKORLKCASLQKGERAKVAVAVARLSQRFKAFKAVSVKLVTDLT 328
 DB 196 PFLDLRDEGKASSAKORLKCASLQKGERAKVAVAVARLSQKPFKAFKAVSVKLVTDLT 255
 QY 329 KVHTCCGHDLLGCADDRADLAKYTCENODSISKLKCECKEPLLEKSHCIAVENDEMP 388
 DB 256 KVHTCCGHDLLGCADDRADLAKYTCENODSISKLKCECKEPLLEKSHCIAVENDEMP 315
 QY 389 ADLPSTLAADPFVESKDVCKKVAEAKDVFLGMPFLYEYARRHPDYVAVLLRLAKTYETLLEK 448
 DB 316 ADLPSTLAADPFVESKDVCKKVAEAKDVFLGMPFLYEYARRHPDYVAVLLRLAKTYETLLEK 375
 QY 449 CCAAADPHECVAKVDFEKPVLVEPONTIKONCELPBOLGKYYFONALLVRYTKYPOVS 508
 DB 376 CCAAADPHECVAKVDFEKPVLVEPONTIKONCELPBOLGKYYFONALLVRYTKYPOVS 435
 QY 509 PFTLVVVSQNTGKVGSKCCCKGHEAKRMPGAEVYLSVTLNQCIVLHEKTPVSDRVTKCCTE 568
 DB 436 PFTLVVVSQNTGKVGSKCCCKGHEAKRMPGAEVYLSVTLNQCIVLHEKTPVSDRVTKCCTE 495
 QY 569 SLVNRPPCFSALEVDVETVYVPEKFNAEFTTFHADICTLSEKROIKQZALVELVGHKPKA 628
 DB 496 SLVNRPPCFSALEVDVETVYVPEKFNAEFTTFHADICTLSEKROIKQZALVELVGHKPKA 555
 QY 629 TKEQLKAVMDPFAAVYERKCCKADYETGPAEKGKLVVAASQAL 672
 DB 556 TKEQLKAVMDPFAAVYERKCCKADYETGPAEKGKLVVAASQAL 599
 RESULT 8
 ALBU_FELCA STANDARD; PRT; 608 AA.
 AC P49064; Q7YSG3;
 DT 01-FEB-1996 (Rel. 33, Created)
 DT 01-FEB-1996 (Rel. 33, Last sequence update)
 DT 10-MAY-2005 (Rel. 47, Last annotation update)
 DE Serum albumin precursor (Allergen Fel d 2).
 GN Name=ALB;
 OS Felis silvestris catus (Cat).
 OC Eukaryota; Metazoa; Chordata; Cranialia; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Laurasiatheria; Carnivora; Fissipedia; Felidae;
 OC Felinae; Felis.
 OX NCBI_TaxID=9685;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RA MEDLINE=96194824; PubMed=8647469; DOI=10.1016/0378-1119(95)00851-9;
 RA Hilger C., Grigioni F., Kohlen M., Hentges F.;
 RT "Sequence of the gene encoding cat (Felis domesticus) serum albumin.";
 RL Gene 169:295-296(1996).
 RN [2]
 RP NUCLEOTIDE SEQUENCE OF 25-608.
 RA Reininger R., Swoboda I., Bohle B., Hauswirth A.W., Valent P.,
 RA Rumpold H., Valenta R., Spletzauer S.;
 RT "Escherichia coli expression and purification of recombinant cat

RT albumin:IgE recognition, induction of basophil activation and
 RT lymphoproliferative responses in atopic patients";
 RL Submitted (MAY-2002) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: Serum albumin, the main protein of plasma, has a good
 CC binding capacity for water, Ca(2+), Na(+), K(+), fatty acids,
 CC hormones, bilirubin and drugs. Its main function is the regulation
 CC of the colloidal osmotic pressure of blood.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: Plasma.
 CC -1- ALLERGEN: Causes an allergic reaction in human.
 CC -1- SIMILARITY: Belongs to the ALB/AFPI/VDB family.
 CC -1- SIMILARITY: Contains 3 albumin domains.
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 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use as long as its content is in no way modified and this statement is not
 CC removed.

CC EMBL; X04842; CA59279.1; -, mRNA.
 CC EMBL; A0487677; CAD32275.1; -, mRNA.
 CC PIR; J04660; S57632.
 CC HSSP; P02768; 1B7B.
 CC SMR; P49064; 26-608.
 CC InterPro: IPR001703; Alphafetoprot.
 CC InterPro: IPR00264; Serum_albumin.
 CC Pfam; PF00273; Serum_albumin_3.
 CC PRINTS; PR00803; AFETOPROTEIN.
 CC PRINTS; PR00802; SERUMALBUMIN.
 CC Prodom; PD002466; Serum_albumin; 1.
 CC SMART; SM00103; ALBUMIN; 3.
 DR PROSITE; PS00212; Lipid-binding; Metal-binding; Repeat; Signal.
 KW Allergen; Copper; Lipid-binding; Metal-binding; Repeat; Signal.
 FT SIGNAL 1 18 By similarity.
 FT PROPEP 19 24 By similarity.
 FT CHAIN 25 608 Serum albumin.
 FT DOMAIN 25 205 Albumin 1.
 FT DOMAIN 212 397 Albumin 2.
 FT DOMAIN 404 595 Albumin 3.
 FT METAL 27 27 Copper.
 FT DISULFID 77 86 By similarity.
 FT DISULFID 99 115 By similarity.
 FT DISULFID 114 125 By similarity.
 FT DISULFID 148 193 By similarity.
 FT DISULFID 192 201 By similarity.
 FT DISULFID 224 270 By similarity.
 FT DISULFID 269 303 By similarity.
 FT DISULFID 289 303 By similarity.
 FT DISULFID 302 313 By similarity.
 FT DISULFID 340 385 By similarity.
 FT DISULFID 384 393 By similarity.
 FT DISULFID 416 462 By similarity.
 FT DISULFID 461 472 By similarity.
 FT DISULFID 485 501 By similarity.
 FT DISULFID 500 511 By similarity.
 FT DISULFID 538 583 By similarity.
 FT DISULFID 582 591 By similarity.
 FT CONFLICT 75 75 K -> N (in Ref. 2).
 FT CONFLICT 94 94 L -> F (in Ref. 2).
 FT CONFLICT 186 186 K -> R (in Ref. 2).
 FT CONFLICT 251 251 E -> D (in Ref. 2).
 FT CONFLICT 282 282 A -> E (in Ref. 2).
 FT CONFLICT 331 331 V -> A (in Ref. 2).
 SQ SEQUENCE 608 AA; 68659 MW; 07E629CAC5F60E5F CRC64;

Query Match 73.6%; Score 2627; DB 1; Length 608;
 Best Local Similarity 80.1%; Pred. No. 3.2e-159;
 Matches 483; Conservative 53; Mismatches 57; Indels 10; Gaps 1;
 Oy 70 SSVLEGGAKKAFIAMLVKGKRDGKSEVNRKFDGSEENFKALVLIAPAOYLQCCPFEDHV 129
 Db 15 SAYSRG-----VTRRRAHQSRIARHNDLGEHRFGLVIVAVSQYVQCCPFEDHV 64

Oy 130 KLVNEVTEFAKTCVADSESAENCDKSIHLTFGDKLCTVAITLRETYGEMADCCAKOEBERNE 189
 Db 65 KLVNTEVTEFAKCVADQSAANCKSIHLLGDKLCTVASLRDQYGMADCCCKEERNE 124
 Oy 190 CFLQHKDNDPRLVYRPEVDVNCIAPFDNNEETPLKTIYETARRRPPRYAABELLPAR 249
 Db 125 CFLQHKDNDPFGOLVTPPADMCTAFHENEORFLGKTYELARRRPPRYAABELLYABE 184
 Oy 250 YRAAPTECCGQADKAACTLIPKIDELRDEGKASSAKORLKCASTQKFGEPAPRAMAVARLS 309
 Db 185 YKGVFTECCBADKRAKCLTPKVDALREKVLASSAKERLKCASLQKFGEPAPRAMAVARLS 244
 Oy 310 QEPFAKFAEAVSKLVYDITKVTETECCHGDLLECADRADLAKYICENODSISKLEKCE 369
 Db 245 QKFPKAFEFIEISGLVYDIAKIHKECHGDLLECADRADLAKYICENODSISKLEKCE 304
 Oy 370 KPILEKSHCIAYENDMPADIPSLAADVYESKDVCKRYAKADVPLGMPLYEYARRHD 429
 Db 305 KPILEKSHCISEVERDELPAIDPLAVDVEDEKVECKNYQEAADVPLGTFPLYEYARRHE 364
 Oy 430 YSVVILLRLAKTYETTLLEKCCAAADPHECYAVPDEFKDLVEBPQVLIKONCELFQDGE 489
 Db 365 YSVSILLRLAKEYEATLEKCCATDDPACTYAHVDFEFLVBERPNUVKTNCELPKLDGE 424
 Oy 490 YKFNALVRYTKVQVSTPTLVESVRLGKVGSKCKHPPAKRMPCADYLSVVLNQL 549
 Db 425 YKFNALLVRYTKVQVSTPTLVESVRLGKVGSKCKHPPAKRMSCADYLSVVLNRL 484
 Oy 550 CVLHEKTPVSDRYTKCCTESLVNRRPFSALBVDFTYVPEKFNALFTTHADICTLSBEK 609
 Db 485 CVLHEKTPVSEHRYTKCCTESLVNRRPFSALGVDEFTYVPEKFAEFTTHADICTLPEBE 544
 Oy 610 ROIKQCTALVELYKHPKATKTEQKAVMDPPAFVFKCCKKADDKETCPAEBGKLVAA90 669
 Db 545 ROIKQSALVELLKHKPKATBEQLKTVMGDFSGFVDKCAAEDEKACFAEBGKLVAA90 604
 Oy 670 AAL 672
 Db 605 AAL 607

RESULT 9
 ALBU CANFA STANDARD; PRT; 608 AA.
 AC P49822; O77705; QPRTS24;
 DT 01-OCT-1996 (Rel. 34, Created)
 DT 01-FEB-2005 (Rel. 46, Last sequence update)
 DT 10-MAY-2005 (Rel. 47, Last annotation update)
 DE Serum albumin precursor (Allergen Can f 3).
 GN Name=Alb;
 OS Canis familiaris (Dog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Laurasiatheria; Carnivora; Fissipedia; Canidae;
 OC Canis.
 ON NCBI_TaxID=9615;
 RP NCBIOTIDE SEQUENCE [MRNA].
 RC STRAIN=Beagle; TISSUE=Liver;
 RA Hliger C.;
 RL Submitted (MAR-1999) to the EMBL/GenBank/DBJ databases.
 RP NCBIOTIDE SEQUENCE.
 RC TISSUE=Liver;
 RA MEDLINE=20148667; Pubmed=10669848; DOI=10.1016/S0091-6749(00)90077-0;
 RA Pandjaitan B., Swoboda I., Brandesjky-Pichler F., Rumpold H.,
 RA Valenta R., Spltzauer S.;
 RT "Escherichia coli expression and purification of recombinant dog
 RT albumin, a cross-reactive animal allergen.";
 RL J. Allergy Clin. Immunol. 105:279-285(2000).
 RP NCBIOTIDE SEQUENCE [MRNA].
 RC STRAIN=Beagle; TISSUE=Liver;
 RA Miyake M., Okazaki M., Iwabuchi S.;

RT "Isolation of a cDNA encoding canine serum albumin." ;
 RN Submitted (Aug-2002) to the EMBL/GenBank/DBJ databases.
 RA [4]
 RP PROTEIN SEQUENCE OF 25-48.
 RX MEDLINE=75011422; PubMed=4414013;
 RA Dixon J.W., Sarkar B.;
 RT "Isolation, amino acid sequence and copper(II)-binding properties of
 peptide (1-24) of dog serum albumin." ;
 RN J. Biol. Chem. 249:5872-5877(1974).
 RM [5]
 RP PROTEIN SEQUENCE OF 25-38.
 RC TISSUE=Heart;
 RX MEDLINE=98163340; PubMed=9504812;
 RA Dunn M.J., Corbett J.M., Wheeler C.H.;
 RT "HSC-2DPAGE and the two-dimensional gel electrophoresis database of
 dog heart proteins." ;
 RN Electrophoresis 18:2795-2802(1997).
 RM [6]
 RP NUCLEOTIDE SEQUENCE OF 215-478.
 RC TISSUE=Salivary gland;
 RX MEDLINE=94201492; PubMed=7512102;
 RA Splitauer S., Schweiger C., Speer W.R., Pandjaitan B., Valent P.,
 RA Wuehl S., Ebner C., Scheiner O., Kraft D., Rumpold H.;
 RT "Molecular characterization of dog albumin as a cross-reactive
 allergen." ;
 RN J. Allergy Clin. Immunol. 93:614-627(1994).
 CC -1- FUNCTION: Serum albumin, the main protein of plasma, has a good
 binding capacity for water, Ca(2+), Na(+), K(+), fatty acids,
 hormones, bilirubin and drugs. Its main function is the regulation
 of the colloidal osmotic pressure of blood.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: Plasma.
 CC -1- ALLELGEM: Causes an allergic reaction in human.
 CC -1- SIMILARITY: Belongs to the ALB/APF/VDB family.
 CC -1- SIMILARITY: Contains 3 albumin domains.
 CC -----
 CC This Swiss-Prot entry is copyright. It is produced through a collaboration
 between the Swiss Institute of Bioinformatics and the EMBL outstation -
 the European Bioinformatics Institute. There are no restrictions on its
 use as long as its content is in no way modified and this statement is not
 removed.
 CC -----
 DR EMBL; AJ133489; CAB64867.1; -; mRNA.
 DR EMBL; Y17737; CA476841.1; -; mRNA.
 DR EMBL; AB090854; BAC10663.1; -; mRNA.
 DR EMBL; S72946; AAB30434.1; -; mRNA.
 DR HSSP; P02768; 1E7E.
 DR SMR; P49822; 26-607.
 DR HSC-2DPAGE; P49822; DOG.
 DR Ensemble; INSCAFG0000003016; Canis familiaris.
 DR InterPro; IPR000264; Serum albumin.
 DR Pfam; PF00273; Serum albumin; 3.
 DR PRINTS; PR00802; SERUMALBUMIN.
 DR ProDom; PD002486; Serum albumin; 1.
 DR SMART; SM00103; ALBUMIN; 3.
 DR PROSITE; PS00212; ALBUMIN; 3.
 DR Allergen; Copper; Direct protein sequencing; Lipid-binding;
 KW Metal-binding; Repeat; Signal.
 FT SIGNAL 1 16 Potential.
 FT PROPEP 19 24
 FT CHAIN 25 608 Serum albumin.
 FT DOMAIN 25 205 Albumin 1.
 FT DOMAIN 212 397 Albumin 2.
 FT METAL 404 595 Albumin 3.
 FT METAL 27 27 Copper (By similarity).
 FT DISULFID 77 86 By similarity.
 FT DISULFID 99 115 By similarity.
 FT DISULFID 114 125 By similarity.
 FT DISULFID 148 193 By similarity.
 FT DISULFID 192 201 By similarity.
 FT DISULFID 224 270 By similarity.
 FT DISULFID 269 303 By similarity.
 FT DISULFID 289 303 By similarity.

FT DISULFID 302 313 By similarity.
 FT DISULFID 340 385 By similarity.
 FT DISULFID 384 393 By similarity.
 FT DISULFID 416 462 By similarity.
 FT DISULFID 461 472 By similarity.
 FT DISULFID 485 501 By similarity.
 FT DISULFID 500 511 By similarity.
 FT DISULFID 538 583 By similarity.
 FT DISULFID 582 591 By similarity.
 FT CONFLICT 1 26 MKVTFISLFLFSSAYSGRLVRRRA -> MDT (in Ref. 2).
 FT CONFLICT 146 146 A -> R (in Ref. 2).
 FT CONFLICT 206 206 I -> T (in Ref. 2).
 FT CONFLICT 349 349 V -> A (in Ref. 2).
 FT CONFLICT 359 359 A -> S (in Ref. 2 and 6).
 FT CONFLICT 448 448 V -> VV (in Ref. 6).
 FT CONFLICT 474 474 E -> D (in Ref. 2 and 6).
 FT CONFLICT 474 474 E -> D (in Ref. 2 and 6).
 SQ SEQUENCE 608 AA; 68605 MW; 3DB012PFC7979CF3 CRC64;
 Query Match 72.1%; Score 2574; DB 1; Length 608;
 Best Local Similarity 78.4%; Pred. No. 7,8e-156;
 Matches 473; Conservative 57; Mismatches 63; Indels 10; Gaps 2;
 QY 70 SSYLGGQAAKERIAMLVKGRDAHKSEVAHREFVDLGEHPKALVILAFAYQLQQGCFEEDHV 129
 DB 15 SAYSNG-----LVR-REAYKSEIARRVYVDLGEHHRGLVAVFSQYLQQGCFEEDHV 64
 QY 130 KLVNEVTEPAKTCVADSEANCDKSIHTLFGDKLCTVATLRETYGEMADCCAKQEPERNE 189
 DB 65 KLAKEVTEPAKCAABESGANDCKSLHTLFGDKLCTVASLHPKYGDMADCCCKQEPDNE 124
 QY 190 CFLQHKDDPNMIPRLVBPVDVMTAFHNDSETEFLPKKYLVEIARHPYFAPABELLFEAKR 249
 DB 125 CFLAKHDDPNPPLVABEPPDLCAAFQDNQELFGKYLVEIARRHPYFAPABELLYVAQQ 184
 QY 250 YKAALTECCQAADKAACILPKLDELRSDEKASSAQRKLKCAKSLQKRGARAFAMVAALS 309
 DB 185 YGVVAECCQAADKAACIGPKLEALREKVLSSAERKCSLQKFGRAFAWAVARLS 244
 QY 310 GRPFAEFAVSKLVTDITKVTRECCGHGDLLECADRDADLAKYICENODSISSKLKECCE 369
 DB 245 GRPFAADPRAEISKVVTDTLTKHKECCGHGDLFCADDRADLAKYICENODSISITLKECCD 304
 QY 370 KEPLERKSHCIAEVENDEMPADLPSTLAADPVESKDYCKNYAEAKDVFGLMFLYEVARRHPD 429
 DB 305 KVLKESQGLAVERDELPGLDPLSLAADPVVEDKVEYCKNYQEAQDVFGLMFLYEVARRHP 364
 QY 430 YSVVTLILRLAKTYETTLKCCCAADPHKCYAKVPEPFRPLYEHPQNLKONCELPEQIGE 489
 DB 365 YSVSILRLAKTYEATLTKCCATDDPPTCYAKVLDPEFPLVDEPQNLVYKNCLEPEKIGE 424
 QY 496 YKQNALLVRYTKKPYOVSTPFLVSVSNLIGVSKCKHPPEAKRMPCADEYLSVVLNQL 549
 DB 425 YGFQNALLVRYTKKPYOVSTPFLVSVSRKLGKGVKCKCKKRESEMSCADPEFLSVVLNRL 484
 QY 550 CVLHKEKTPVSDRVTKCTESLIVNRRPFCFSALAEVDVITYPKENAFETFFHADICTLSRKE 609
 DB 485 CVLHKEKTPVSEKRVTKCCSSESLVNRPRFCFSGLEVDVITYPKENAFETFFHADICTLPRAE 544
 QY 610 RQIKKQYALVELVKKPKRYATKQELKAVWDDPFAFPEKCCKADKDTCAEBSGKLVAAASQ 669
 DB 545 RQVKKQYALVELVKKPKRYATDQELKAVWGDGFAFVEKCCAAENKGCPSSEBGPKLVAQAQ 604
 QY 670 AAL 672
 DB 605 AAL 607
 RESULT 10
 Q95VB7 SCHEMA
 ID Q95VB7 SCHEMA PRELIMINARY; PRT; 608 AA.
 AC Q95VB7;
 DT 01-DEC-2001 (TRENDEL 19, Created)

QY	70	SSYLEGQAAKERIAMIIVKGRDAHKSEVARRFKDLEGEMFKALVLIATAFAQYIQQCPPEHDV	129
DB	15	SAYSRG-----VLRDTHKSEIARRFNDLGEKHKHKGVLVAVFSQYLQQCPPEHDV	64
QY	130	KLVNVEVTEPFAKTCVADSESAENCDKSLHTYFGDKLCTVAATLRBTYGMADCCAKOBERBNE	189
DB	65	KLVNVEVTEPFAKTCVADSESAENCDKSLHTYFGDKLCTVAATLRBTYGMADCCAKOBERBNE	124
QY	190	CFLOHKDNDPNLPRLVREVDVWCTAFHNEBETFLKKYLYETIARRRHPYFAPPELLFPFAKR	249
DB	125	CFLTHKDDHPNLPKL-KPEPDAQCAAFQEDPDKFLKYLIVAVARRRHPYFYGEBLLFPHABE	183
QY	250	YKAAPTECCOAAADKKAACLLPKLDELREDEKASSAKQRLKASIQKGERAPFAWAVARLUS	309
DB	184	YKADFTTECCPADDKKACGLIPKIDALKERILLSSAKERLKCSSFQKGERAPFAWAVARLUS	243
QY	310	QRPPEKAEPAEVSCLVTDLTRKVTTECHGDLLECADRRADLAKYICENQDSISSKLEKCEE	369
DB	244	QKFPKADFAEVSCKLVTDLTRKVNHECCHGDLLECADRRADLAKYICENQDSISSKLEKACCD	303
QY	370	KPLLEKSHCIAEVENDEMBADI.PSLAADPVESSKDVCKQNYAAKADVFLGMPFLVEYARRHPD	429
DB	304	KPLLOKSHCIAEVENDEMBADI.PSLAADPVESSKDVCKQNYAAKADVFLGMPFLVEYARRHPD	363
QY	430	YSVLLRLAKTYETTLTEKCCAAADPHCEYAKVDFEKPULVEBPQNLIKONCELFPQJGE	489
DB	364	YSVLLRLAKTYETTLTEKCCAAADPHCEYAKVDFEKPULVEBPQNLIKONCELFPQJGE	423
QY	490	YKFNALVRYTKKPVQVSTPPTLVSRNLGKRGSKCCCKHPAKRMPKCBADYLSVTLNQL	549
DB	424	YDFONMLIVRYTKKAPQVSTPPTLVSRNLGKRGSKCCCKHPAKRMPKCBADYLSVTLNQL	483
QY	550	CYLHEKTPVSDRYTKCCTESLIVNRRPCFSALREVDERTYVPEFAEFTFHADICTLSEKE	609
DB	484	CYLHEKTPVSEKTKCCTESLIVNRRPCFSALREVDERTYVPEFAEFTFHADICTLSEKE	543
QY	610	ROIKKQTAVALVELVHKPKATKKEQLKAVMDPFAAFVKECKKADDKETCFABEGKGLVAASQ	669
DB	544	KOIKKQSALAEVLVHKPKATKKEQLKAVMDPFAAFVKECKKADDKETCFABEGKGLVAASQ	603
QY	670	AAL 672	
DB	604	LAL 606	

CC	CC	-1- SIMILARITY: Belongs to the ALB/APP/VDL family.
CC	CC	-1- SIMILARITY: Contains 3 albumin domains.
CC	CC	This Swiss-Proct entry is copyright. It is produced through a collaboration
CC	CC	between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC	CC	the European Bioinformatics Institute. There are no restrictions on its
CC	CC	use as long as its content is in no way modified and this statement is not
CC	CC	removed.
DR	DR	EMBL: X74045; CAA52194.1; -: mRNA.
DR	DR	PIR: S34053; ABHOS.
DR	DR	HSSP: P02758; 1HK1.
DR	DR	SMR: P35747; 27-607.
DR	DR	InterPro: IPR00264; Serum albumin.
DR	DR	Pfam: PF00273; Serum albumin; 3.
DR	DR	PRINTS: PR00802; SERUMALBUMIN.
DR	DR	ProDom: PD002486; Serum albumin; 1.
DR	DR	SMART: SM00103; ALBUMIN_3.
DR	DR	PROSITE: PS00212; ALBUMIN; 3.
KW	FT	ALLERGEN; Copper; Lipid-binding; Metal-binding; Repeat; signal.
FT	FT	SIGNAL 1 18
FT	FT	PROPEP 19 24
FT	FT	CHAIN 25 607
FT	FT	DOMAIN 25 204
FT	FT	DOMAIN 211 396
FT	FT	DOMAIN 403 594
FT	FT	METAL 27 27
FT	FT	METAL 77 86
FT	FT	DISULFID 99 115
FT	FT	DISULFID 114 125
FT	FT	DISULFID 147 192
FT	FT	DISULFID 191 200
FT	FT	DISULFID 223 269
FT	FT	DISULFID 268 276
FT	FT	DISULFID 288 302
FT	FT	DISULFID 301 312
FT	FT	DISULFID 339 384
FT	FT	DISULFID 383 392
FT	FT	DISULFID 415 461
FT	FT	DISULFID 460 471
FT	FT	DISULFID 484 500
FT	FT	DISULFID 499 510
FT	FT	DISULFID 537 582
FT	FT	DISULFID 581 590
SQ	SQ	SEQUENCE 607 AA; 68599 MW; 256F6E830A1B90C5 CRC64;

Query Match
 Best Local Similarity 74.6%; Score 2481.5; DB 1; Length 607;
 Matches 450; Conservative 70; Mismatches 72; Indels 11; Gaps 2;

QY	70	SSYLEGQAAKERIAMIIVKGRDAHKSEVARRFKDLEGEMFKALVLIATAFAQYIQQCPPEHDV	129
DB	15	SAYSRG-----VLRDTHKSEIARRFNDLGEKHKHKGVLVAVFSQYLQQCPPEHDV	64
QY	130	KLVNVEVTEPFAKTCVADSESAENCDKSLHTYFGDKLCTVAATLRBTYGMADCCAKOBERBNE	189
DB	65	KLVNVEVTEPFAKTCVADSESAENCDKSLHTYFGDKLCTVAATLRBTYGMADCCAKOBERBNE	124
QY	190	CFLOHKDNDPNLPRLVREVDVWCTAFHNEBETFLKKYLYETIARRRHPYFAPPELLFPFAKR	249
DB	125	CFLTHKDDHPNLPKL-KPEPDAQCAAFQEDPDKFLKYLIVAVARRRHPYFYGEBLLFPHABE	183
QY	250	YKAAPTECCOAAADKKAACLLPKLDELREDEKASSAKQRLKASIQKGERAPFAWAVARLUS	309
DB	184	YKADFTTECCPADDKKACGLIPKIDALKERILLSSAKERLKCSSFQKGERAPFAWAVARLUS	243
QY	310	QRPPEKAEPAEVSCLVTDLTRKVTTECHGDLLECADRRADLAKYICENQDSISSKLEKCEE	369
DB	244	QKFPKADFAEVSCKLVTDLTRKVNHECCHGDLLECADRRADLAKYICENQDSISSKLEKACCD	303
QY	370	KPLLEKSHCIAEVENDEMBADI.PSLAADPVESSKDVCKQNYAAKADVFLGMPFLVEYARRHPD	429
DB	304	KPLLOKSHCIAEVENDEMBADI.PSLAADPVESSKDVCKQNYAAKADVFLGMPFLVEYARRHPD	363


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QY 430 YSVVLLRLAKYETTLTEKCAADPHCEYAVFDEKPLVBERPOMLIKONCELPLQDGE 489
DB 364 YSVSLRLRAKTEEATLEKCCABADPPACRYTFVDDOTPLVEBBSKLVKKNOCDFEERGE 423
QY 490 YKFNALLVYTKKVPQVSTPTLVESRNIGKVGSKCKKHPKAKMPCADYLSVVLNQL 549
DB 424 YDQNMALIVYTKKAPQVSTPTLVETGRTGKYGSRCKLPESERLPCSSNHIALALNRL 483
QY 550 CVLHEKTPVSDRVTKCCTESLVNRRPCFSALVDEYTVYKPFNAETPTFHADICTLSEKE 609
DB 484 CVLHEKTPVSEKTKTCTDLSLAERPCFSALVDEYTVYKPFNAETPTFHADICTLSEKE 543
QY 610 RQIKKQCALVYLVKHKPKAKKQKQKVMDDPAAVFEKCCADKKEKCPAESEKGLVAASQ 669
DB 544 KQIKKQCALVYLVKHKPKAKKQKQKVMDDPAAVFEKCCADKKEKCPAESEKGLVAASQ 603
QY 670 AAL 672
DB 604 LAL 606

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RESULT 13

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QSEG48 MICFO PRELIMINARY; PRT; 608 AA.
AC QSEG48;
DT 10-MAY-2005 (TREMBlrel. 30, Created)
DT 10-MAY-2005 (TREMBlrel. 30, Last sequence update)
DT 10-MAY-2005 (TREMBlrel. 30, Last annotation update)
DE Albumin.
OS Microtus fortis calamorum.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
OC Muridae; Arvicolinae; Microtus.
OX NCBI_TaxID=311220;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Liver;
RA Hu W.-X., Wu G.-J., Qin Z.-Q., Luo S.-Q.;
RT "Albumin gene of Microtus fortis calamorum liver.";
RL Submitted (JAN-2005) to the EMBL/GenBank/DBJ databases.
DR EMBL: AY885265; AAW79113.1; -; mRNA.
DR InterPro: IPR001703; Alphafetoprot.
DR Pfam: PF00273; Serum_albumin.
DR PRINTS: PR00803; APETOPROTEIN.
DR PRODOM: PD002486; Serum_albumin; 3.
DR SMART: SM00103; ALBUMIN_3.
DR PROSITE: PS00212; ALBUMIN_2.
SQ SEQUENCE 608 AA; 68308 MW; B04A06133949403P CRC64;

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Query Match 69.2%; Score 2469; DB 2; Length 608;
Best Local Similarity 76.2%; Pred. No. 3.9e-149;
Matches 445; Conservative 65; Mismatches 74; Indels 0; Gaps 0;
QY 89 RDAHKSEVAHRFKDGLGEMFKAALVLIAPAQYLQCCPFEDHVKLVNVEVTEPAKCVADESA 148
DB 144 ARVMCTSFQENPAPAFMGHTYLAHVARRRHYFAPBELVYAAEQSALMTRCCAEADKAKACIG 203
QY 149 ENCDKSIHTLFGDGLCTVAATLREYTGMAADCCAOEPRRNGECFOHDDNDNPNLRLVYRPE 208
DB 84 ENCDKSIHTLFGDGLCAIPNGDNYVAEMVABCCAQEPRRNGECFOHDDNDNPNLRLVYRPE 143
QY 209 VDVVICTAFHDNEEFTLKKYLYEIRARHPYFYAPALILFFAKRYKAAFTTECCQAAADKAAACL 268
DB 144 ARVMCTSFQENPAPAFMGHTYLAHVARRRHYFAPBELVYAAEQSALMTRCCAEADKAKACIG 203
QY 269 PKDLDELDEGKASSAKORLKCASIQKEGERRAFKAWAVARLSQRPKAPKAPAVSVKLVLDLT 328
DB 204 PKDLALVKKALLSSVQKRLKCSSLEKFERAFKAWAVARMSQKPKADFAEITTKLAVDILT 263
QY 329 KVIHECCGDIILECADDDADLAKYICENQDISSSKLVKCCCKPILLESKSHCAEVENDEMP 388

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DB 264 KYTQECCHDDLLCECADDDRLLELAKYMCMDNQATTSKIHFTCCDDKRVLYQKAKCLAEVDHDEMP 323
QY 389 ADLPSLAADPVEBSKQYKRYARAKOVFLGMPLYEYVARRRDPYVSVLLRLAKYETTLER 448
DB 324 ADLTPPLADPVEBKQVCKRYARAKOVFLGMPLYEYVARRRDPYVSVLLRLAKYETTLER 383
QY 449 CCAADPHCEYAVFDEKPLVBERPOMLIKONCELPEQDGEYKFNALLVRYTKVQVQS 508
DB 384 CCAADPHACYGVVPEFQPLVEBPKLVKANCELEKGEYGFQVALLVRYTQKAPQVS 443
QY 509 TPTLVESRNIGKVGSKCKKHPKAKMPCADYLSVVLNQLCVLHEKTPVSDRVTKCCTGE 568
DB 444 TPTLVESRNIGKVGSKCALPEADRLPCVEDYLSAIIHNLCVLHEKTPVSDRVTKCCTGE 503
QY 569 SLVNRPPCSALVDEYTVYKPFNAETPTFHADICTLSEKEQIKKQCALVYLVKHKPKPA 628
DB 504 SVERRPPCSALVDEYTVYKPFNAETPTFHADICTLSEKEQIKKQCALVYLVKHKPKPA 563
QY 629 TREQLKAVMDDPAAVFEKCCADKKEKCPAESEKGLVAASQAL 672
DB 564 TEDQLKAVMDDPAAVFEKCCADKKEKCPAESEKGLVAASQAL 607

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RESULT 14

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ALBU RABIT STANDARD; PRT; 608 AA.
ID ALBU RABIT
AC P49065;
DT 01-FEB-1996 (Rel. 33, Created)
DT 29-MAR-2004 (Rel. 43, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE Serum albumin precursor.
GN Name=Alb.
OS Oryctolagus cuniculus (Rabbit).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Glires; Lagomorpha; Leporidae;
OC Oryctolagus.
OX NCBI_TaxID=9986;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RC STRAIN=New Zealand white; TISSUE=Liver;
RX MEDLINE=97275135; Pubmed=9129029;
RA Syed S., Schuyler P.D., Kulczycky M., Sheffield W.P.;
RT "Potent antithrombin activity and delayed clearance from the circulation characterize recombinant hirudin genetically fused to albumin.";
RL Blood 89:3243-3252(1997).
RN [2]
RP SEQUENCE REVISION TO 322-323 AND 506-507.
RA Sheffield W.P.;
RL Submitted (APR-2003) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: Serum albumin, the main protein of plasma, has a good binding capacity for water, Ca(2+), Na(+), K(+), fatty acids, hormones, bilirubin and drugs. Its main function is the regulation of the colloidal osmotic pressure of blood.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- TISSUE SPECIFICITY: Plasma.
CC -1- SIMILARITY: Belongs to the ALB/AFB/VDB family.
CC -1- SIMILARITY: Contains 3 albumin domains.

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CC -----
DB EMBL: U18344; AAB58347.2; -; mRNA.
DB HSP: P02768; I87B.
DB SRR: P49065; 26-608.
DR InterPro: IPR001703; Alphafetoprot.
DR InterPro: IPR000264; Serum_albumin.
DR Pfam: PF00273; Serum_albumin_3.
DR PRINTS: PR00803; APETOPROTEIN.

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DR PRINTS; PRO0802; SERUMALBUMIN.
DR ProDom; PD002486; Serum_albumin; 1.
DR SMART; SM00103; ALBUMIN; 3.
DR PROSITE; PS00212; ALBUMIN; 3.
KW Copper; Lipid-binding; Metal-binding; Repeat; Signal.
FT SIGNAL 1 18 By similarity.
FT PROPEP 19 24 By similarity.
FT CHAIN 25 608 Serum albumin.
FT DOMAIN 25 205 Albumin 1.
FT DOMAIN 212 397 Albumin 2.
FT DOMAIN 404 595 Albumin 3.
FT METAL 27 27 Copper.
FT DISULFID 77 86 By similarity.
FT DISULFID 99 115 By similarity.
FT DISULFID 114 125 By similarity.
FT DISULFID 148 193 By similarity.
FT DISULFID 192 201 By similarity.
FT DISULFID 224 270 By similarity.
FT DISULFID 269 277 By similarity.
FT DISULFID 289 303 By similarity.
FT DISULFID 302 313 By similarity.
FT DISULFID 340 385 By similarity.
FT DISULFID 384 393 By similarity.
FT DISULFID 416 462 By similarity.
FT DISULFID 461 472 By similarity.
FT DISULFID 485 501 By similarity.
FT DISULFID 500 511 By similarity.
FT DISULFID 538 583 By similarity.
FT DISULFID 582 591 By similarity.
SQ SEQUENCE 608 AA; 68910 MW; 9EECFDA861EE09 CRC64;

Query Match 69.0%; Score 2462; DB 1; Length 608;
Best Local Similarity 74.4%; Pred. No. 1.1e-148;
Matches 435; Conservative 78; Mismatches 72; Indels 0; Gaps 0;

89 RDAHSEVAVRFRKDI...
24 RRAHSEVAVRFRKDI...
149 ENCDKSLHTLFDGDK...
84 ANCDKSLHTLFDGDK...
209 VDVMTAFHNDNEET...
144 ADVLCAFHDEKAF...
269 PKLDELREDEGKAS...
204 PKLDALKEKALIS...
329 KVNTECGHGDILLE...
264 KVNTECGHGDILLE...
389 ADLPSTLAADPFV...
324 AGPRAVAEERFED...
449 CCAAADPHGCVAV...
384 CCAATDDBHAC...
509 TPTLVEVSNRNLK...
444 TPTLVEVSNRNLK...
569 SLVNRPPCFSALE...
504 SLVDRRPFCSAL...
629 TKEQLKAVMDP...
Query Match 68.9%; Score 2460; DB 2; Length 608;
Best Local Similarity 75.9%; Pred. No. 1.5e-148;
Matches 443; Conservative 66; Mismatches 75; Indels 0; Gaps 0;

DB 564 TNDQLKTVVGEFT...
RESULT 15
O5B649_MICRO PRELIMINARY; PRT; 608 AA.
AC O5B649;
DT 10-MAY-2005 (TrEMBLrel. 30, Created)
DT 10-MAY-2005 (TrEMBLrel. 30, Last sequence update)
DT 10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
DE Albumin.
OS Microtus fortis fortis.
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
OC Muridae; Arvicolinae; Microtus.
OX NCBITaxID=311338;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Liver;
RA Hu W.-X., Wu G.-U., Qin Z.-Q., Luo S.-Q.;
RT "Albumin gene of Microtus fortis liver."
RL Submitted (JAN-2005) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY885264; AAW79112.1; -; mRNA.
DR InterPro; IPR001703; Alphafetoprot.
DR InterPro; IPR000264; Serum_albumin.
DR Pfam; PF02773; Serum_albumin; 3.
DR PRINTS; PR00803; AFETOPROTEIN.
DR PRINTS; PR00802; SERUMALBUMIN.
DR ProDom; PD002486; Serum_albumin; 1.
DR SMART; SM00103; ALBUMIN; 3.
DR PROSITE; PS00212; ALBUMIN; 2.
SQ SEQUENCE 608 AA; 68309 MW; 060802BCD5E219D2 CRC64;

Query Match 68.9%; Score 2460; DB 2; Length 608;
Best Local Similarity 75.9%; Pred. No. 1.5e-148;
Matches 443; Conservative 66; Mismatches 75; Indels 0; Gaps 0;

89 RDAHSEVAVRFRKDI...
24 RRAHSEVAVRFRKDI...
149 ENCDKSLHTLFDGDK...
84 ENCDKSLHTLFDGDK...
209 VDVMTAFHNDNEET...
144 ADVLCAFHDEKAF...
269 PKLDELREDEGKAS...
204 PKLDALKEKALIS...
329 KVNTECGHGDILLE...
264 KVNTECGHGDILLE...
389 ADLPSTLAADPFV...
324 AGPRAVAEERFED...
449 CCAAADPHGCVAV...
384 CCAATDDBHAC...
509 TPTLVEVSNRNLK...
444 TPTLVEVSNRNLK...
569 SLVNRPPCFSALE...
504 SLVDRRPFCSAL...
Query Match 68.9%; Score 2460; DB 2; Length 608;
Best Local Similarity 75.9%; Pred. No. 1.5e-148;
Matches 443; Conservative 66; Mismatches 75; Indels 0; Gaps 0;

Qy 629 TKEOLKAVMDDFAAFVEKCCCKADDKENTCPAEEGKLVAA6QAAU 672

Db 564 TGDQLKTVMGEFSAPLBRKCCCKADDKEXACFSBBGPKLVATSQAAL 607

Search completed: April 19, 2006, 12:08:49
Job time : 181.074 secs

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GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using SW model

Run on: April 19, 2006, 12:09:12 ; Search time 42.6037 Seconds
(watch alignment)
1307.948 Million cell updates/sec

Title: US-10-775-180-447

Perfect score: 3568
Sequence: 1 MHIRYFLFLSLFVQSLHHT.....TGRAERGGKLVAAQNALGL 674

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-Processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

- 1: /cgn2_6/prodata/1/iaa/5/COMB.pep.*
- 2: /cgn2_6/prodata/1/iaa/6/COMB.pep.*
- 3: /cgn2_6/prodata/1/iaa/H/COMB.pep.*
- 4: /cgn2_6/prodata/1/iaa/PTUS/COMB.pep.*
- 5: /cgn2_6/prodata/1/iaa/RE/COMB.pep.*
- 6: /cgn2_6/prodata/1/iaa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3112.5	87.2	787	1 US-08-256-938-4	Sequence 4, Appli
2	3112.5	87.2	787	1 US-08-797-689-16	Sequence 16, Appl
3	3112.5	87.2	787	2 US-09-984-186-16	Sequence 16, Appl
4	3108	87.1	609	2 US-09-976-594-977	Sequence 977, App
5	3108	87.1	609	2 US-09-919-039-970	Sequence 2, Appl
6	3108	87.1	610	1 US-08-797-689-2	Sequence 2, Appl
7	3108	87.1	610	2 US-09-984-186-2	Sequence 2, Appl
8	3108	87.1	622	2 US-09-949-016-11170	Sequence 11170, A
9	3108	87.1	783	1 US-08-256-938-2	Sequence 2, Appl
10	3104	87.0	609	1 US-08-222-619-3	Sequence 3, Appl
11	3104	87.0	609	1 US-08-433-037-4	Sequence 4, Appl
12	3104	87.0	609	2 US-08-897-956A-2	Sequence 2, Appl
13	3104	87.0	609	4 PCT-US95-04075-3	Sequence 3, Appl
14	3103.5	87.0	978	1 US-08-897-956A-3	Sequence 3, Appl
15	3103	87.0	585	1 US-08-153-799-14	Sequence 14, Appl
16	3103	87.0	585	1 US-08-702-572-2	Sequence 2, Appl
17	3103	87.0	585	2 US-08-769-746-2	Sequence 2, Appl
18	3103	87.0	585	2 US-09-833-118A-18	Sequence 18, Appl
19	3103	87.0	585	2 US-09-832-929A-18	Sequence 18, Appl
20	3103	87.0	585	2 US-09-833-111A-18	Sequence 18, Appl
21	3093	86.7	585	1 US-08-448-196A-3	Sequence 3, Appl
22	3093	86.7	585	1 US-08-984-176-1	Sequence 1, Appl
23	2458.5	68.9	583	1 US-08-448-196A-5	Sequence 5, Appl
24	2450.5	68.7	583	2 US-08-448-196A-4	Sequence 4, Appl
25	2450.5	68.7	583	2 US-10-360-101-200	Sequence 200, App
26	2432.5	68.2	583	1 US-08-448-196A-6	Sequence 6, Appl
27	2426	68.0	584	1 US-08-448-196A-7	Sequence 7, Appl

28	2393.5	67.1	604	2	US-10-045-170A-1	Sequence 1, Appl
29	2389	67.0	582	1	US-08-134-638-1	Sequence 1, Appl
30	1256.5	35.2	609	1	US-08-222-619-4	Sequence 4, Appl
31	1256.5	35.2	609	2	US-09-976-594-456	Sequence 456, App
32	1256.5	35.2	609	4	PCT-US95-04075-4	Sequence 4, Appl
33	1256.5	35.2	612	2	US-09-949-016-11201	Sequence 11201, A
34	1213.5	34.0	609	2	US-08-186-949A-2	Sequence 2, Appl
35	1206.5	33.8	590	1	US-08-377-309-2	Sequence 2, Appl
36	1206.5	33.8	590	2	US-09-186-723-2	Sequence 2, Appl
37	1206.5	33.8	590	2	US-08-505-012-5	Sequence 5, Appl
38	1206.5	33.8	590	2	US-09-186-949A-3	Sequence 3, Appl
39	1206.5	33.8	590	2	US-08-758-757-2	Sequence 2, Appl
40	1206.5	33.8	590	2	US-09-187-978-2	Sequence 2, Appl
41	1206.5	33.8	590	2	US-10-115-701A-2	Sequence 2, Appl
42	1206.5	33.8	590	2	US-09-940-308A-2	Sequence 2, Appl
43	1206.5	33.8	590	2	US-09-940-308A-2	Sequence 2, Appl
44	1206.5	33.8	590	4	PCT-US96-00996-5	Sequence 5, Appl
45	1164.5	32.6	579	1	US-08-448-196A-8	Sequence 8, Appl

ALIGNMENTS

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RESULT 1
US-08-256-938-4
; Sequence 4, Application US/08256938
; Patent No. 5665863
; GENERAL INFORMATION:
; APPLICANT: Yen, Patrice
; TITLE OF INVENTION: NEW POLYPEPTIDES HAVING GRANULOCYTE
; TITLE OF INVENTION: COLONY STIMULATING ACTIVITY, PREPARATION THEREOF AND
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING SAID POLYPEPTIDES
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Rhone-Poulenc Rorer Inc.
; STREET: 500 Arcola Road, 3C43
; CITY: Collegetville
; STATE: PA
; COUNTRY: USA
; ZIP: 19426
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: Macintosh
; OPERATING SYSTEM: System 7.1
; SOFTWARE: Word 5.0 (PatentIn)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/256,938
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: FR 92/01065
; FILING DATE: 31-JAN-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Goodman, Rosanne
; REGISTRATION NUMBER: 32,534
; REFERENCE/DOCKET NUMBER: ST92007-US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (610) 454-3817
; TELEFAX: (610) 454-3808
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 787 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-256-938-4

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Query Match 87.2% Score 3112.5; DB 1; Length 787;
Best Local Similarity 94.6%; Pred No. 2.3e-279;
Matches 596; Conservative 4; Mismatches 29; Indels 1; Gaps 1;
OY 46 QAAKEFIAMLVKGRHGGRFTSDVSSYLE-QAAKEFIAMLVKGRDAHSEVAHREKDLG 104

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Db 158 QGAMPAFASAFORRAGGVLVASHLQSFLEVSRYVLRHLAQPGGGDHAKSEVAHRFKDVG 217
QY 105 EENFKALVLIIFAQYIYOQCPFEDHVKLVNEVTEFAKTCVAADSSAENCKSLHTLFGDKLC 164
Db 218 EENFKALVLIIFAQYIYOQCPFEDHVKLVNEVTEFAKTCVAADSSAENCKSLHTLFGDKLC 277
QY 165 TVATLRETYGEMADCCAKOEPERNECFLOHKDQNDPMLPRVPEVDVWMCSTAFHNDSEFTL 224
Db 278 TVATLRETYGEMADCCAKOEPERNECFLOHKDQNDPMLPRVPEVDVWMCSTAFHNDSEFTL 337
QY 225 KKYLYEIAARRHPYFAPBELLFPAKRYKAAFTBCCQADRAACLLPDLDELDEBGRKASSAK 284
Db 338 KKYLYEIAARRHPYFAPBELLFPAKRYKAAFTBCCQADRAACLLPDLDELDEBGRKASSAK 397
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Db 398 QRLKCASTLQKFGERAFAKAWAVARLSQRPFAKFAFVSKLVTDLTKVHTBCCGHDLLFCAD 457
QY 345 DRADLAKYICENQDSTSSKLEKCEKPELLEKSHCIAEVENDEMPADLPSLAADPVESKDY 404
Db 458 DRADLAKYICENQDSTSSKLEKCEKPELLEKSHCIAEVENDEMPADLPSLAADPVESKDY 517
QY 405 CNKYAARAKOVFLGMFLYBYARRRHPDYSVLLLRILAKTYETTLKCCAAADPHRCYAKVFD 464
Db 518 CNKYAARAKOVFLGMFLYBYARRRHPDYSVLLLRILAKTYETTLKCCAAADPHRCYAKVFD 577
QY 465 EFKPLVEBPONLIKONCELFEOUGEYKFNALLVRYTKKVPQVSTPTLVESVSNLGRKVS 524
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QY 525 KCKKHEARMPKCAEDYLSVNLQCLVHEKTPVSDRVTYKCTESTLVNRRPCFSALFVDE 584
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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/256,927
; FILING DATE: 28-JUL-1994
; APPLICATION NUMBER: FR 92/01064
; FILING DATE: 31-JAN-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/FR93/00085
; FILING DATE: 28-JAN-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith Ph.D., Julie K.
; REGISTRATION NUMBER: P-38,619
; REFERENCE/DOCKET NUMBER: ST92006-US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (610) 454-3839
; TELEFAX: (610) 454-3808
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 787 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-797-689-16

Query Match 87.2%; Score 3112.5; DB 1; Length 787;
Best Local Similarity 94.6%; Pred. No. 2.3e-279;
Matches 596; Conservative 4; Mismatches 29; Indels 1; Gaps 1;

46 QAAKEFIAMLVKGRGEGFTSDVSSYLE-GQAAKEFIAMLVKGRDAKSEVAHRFKDVG 104
158 QGAMPAFASAFORRAGGVLVASHLQSFLEVSRYVLRHLAQPGGGDHAKSEVAHRFKDVG 217
105 EENFKALVLIIFAQYIYOQCPFEDHVKLVNEVTEFAKTCVAADSSAENCKSLHTLFGDKLC 164
218 EENFKALVLIIFAQYIYOQCPFEDHVKLVNEVTEFAKTCVAADSSAENCKSLHTLFGDKLC 277
165 TVATLRETYGEMADCCAKOEPERNECFLOHKDQNDPMLPRVPEVDVWMCSTAFHNDSEFTL 224
278 TVATLRETYGEMADCCAKOEPERNECFLOHKDQNDPMLPRVPEVDVWMCSTAFHNDSEFTL 337
225 KKYLYEIAARRHPYFAPBELLFPAKRYKAAFTBCCQADRAACLLPDLDELDEBGRKASSAK 284
338 KKYLYEIAARRHPYFAPBELLFPAKRYKAAFTBCCQADRAACLLPDLDELDEBGRKASSAK 397
285 QRLKCASTLQKFGERAFAKAWAVARLSQRPFAKFAFVSKLVTDLTKVHTBCCGHDLLFCAD 344
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345 DRADLAKYICENQDSTSSKLEKCEKPELLEKSHCIAEVENDEMPADLPSLAADPVESKDY 404
458 DRADLAKYICENQDSTSSKLEKCEKPELLEKSHCIAEVENDEMPADLPSLAADPVESKDY 517
405 CNKYAARAKOVFLGMFLYBYARRRHPDYSVLLLRILAKTYETTLKCCAAADPHRCYAKVFD 464
518 CNKYAARAKOVFLGMFLYBYARRRHPDYSVLLLRILAKTYETTLKCCAAADPHRCYAKVFD 577
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578 EFKPLVEBPONLIKONCELFEOUGEYKFNALLVRYTKKVPQVSTPTLVESVSNLGRKVS 637
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638 KCKKHEARMPKCAEDYLSVNLQCLVHEKTPVSDRVTYKCTESTLVNRRPCFSALFVDE 697
585 TVYPKFNAETFTFHADICTLSEKERQIKKQTAIVLVEVHKRPKATEQOLKAVWDDFAAFV 644
698 TVYPKFNAETFTFHADICTLSEKERQIKKQTAIVLVEVHKRPKATEQOLKAVWDDFAAFV 757
645 EKCKKADDKETCPAEBGKGLVAASQAALGL 674
758 EKCKKADDKETCPAEBGKGLVAASQAALGL 787

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RESULT 3

US-09-984-186-16
 ; Sequence 16, Application US/09984186
 ; Patent No. 6686179
 ; GENERAL INFORMATION:
 ; APPLICANT: Fleer, Reinhard
 ; Fournier, Alain
 ; Gultion, Jean-Dominique
 ; Jung, Gerard
 ; Yeh, Patrice
 ; TITLE OF INVENTION: NOVEL BIOLOGICALLY ACTIVE POLYPEPTIDES,
 ; PREPARATION THEREOF AND PHARMACEUTICAL COMPOSITION
 ; CONTAINING SAID POLYPEPTIDES
 ; NUMBER OF SEQUENCES: 36
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSES: Rhone-Poulenc Rorer Inc.
 ; STREET: 500 Arcola Road, 3c43
 ; CITY: Collegeville
 ; STATE: PA
 ; COUNTRY: USA
 ; ZIP: 19426
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: Macintosh
 ; OPERATING SYSTEM: System 7.1
 ; SOFTWARE: word 5.1 (Patentlin)
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/984,186
 ; FILING DATE: 29-Oct-2001
 ; CLASSIFICATION: <Unknown>
 ; PRIORITY APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/797,689
 ; FILING DATE: 31-JAN-1997
 ; APPLICATION NUMBER: US 08/256,927
 ; FILING DATE: 28-JUL-1994
 ; APPLICATION NUMBER: FR 92/01064
 ; FILING DATE: 31-JAN-1992
 ; APPLICATION NUMBER: PCT/FR93/00085
 ; FILING DATE: 28-JAN-1993
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Smith Ph.D., Julie K.
 ; REGISTRATION NUMBER: P-38,619
 ; REFERENCE/DOCKET NUMBER: SP92006-US
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (610) 454-3839
 ; TELEFAX: (610) 454-3808
 ; INFORMATION FOR SEQ ID NO: 16:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 787 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; SEQUENCE DESCRIPTION: SEQ ID NO: 16:
 ; US-09-984-186-16

Query Match 87.2%; Score 3112.5; DB 2; Length 787;
 Best Local Similarity 94.6%; Pred. No. 2.3e-279;
 Matches 596; Conservative 4; Mismatches 29; Indels 1; Gaps 1;

QY 46 QAAKEFIAMLVKGRHGEFTSDVSYLR-GQAAKEFIAMLVKGRDHNKSEVVARHPFDLG 104
 DB 158 QGAMPAPASAPQRAGGVVYASHQSTLEVSRYRLRLAQPGGGGDHKKSEVVARHPFDLG 217
 QY 105 EENFKALVLIAPAGYIQQCPPEHDVKLVNVTBPAKTCVADSEANCDKSLHTLFGDKLC 164
 DB 218 EBNFKALVLIAPAGYIQQCPPEHDVKLVNVTBPAKTCVADSEANCDKSLHTLFGDKLC 277
 QY 165 TVATLRTYGMADCCAKQPERNECFLOHKDNDPNI.PRLVPRVDVWCTAFHNDERTPL 224
 DB 278 TVATLRTYGMADCCAKQPERNECFLOHKDNDPNI.PRLVPRVDVWCTAFHNDERTPL 337
 QY 225 KKYLYEIAARRHPYFVABELLFFPAKRYKAAPTECCQAADKAACLIPKLDLDEBEGKASSAK 284
 DB 338 KKYLYEIAARRHPYFVABELLFFPAKRYKAAPTECCQAADKAACLIPKLDLDEBEGKASSAK 397

QY 285 ORLKCASIQKFGGERAFKAWAVARLSQRPKAEFAEVSKLVTDLTKVHTTECHGDI.LBQAD 344
 DB 398 ORLKCASIQKFGGERAFKAWAVARLSQRPKAEFAEVSKLVTDLTKVHTTECHGDI.LBQAD 457
 QY 345 DRADLAKYICENQDISISKLECCCKEPILEKSHCIAVENDEMPADLPBLADPVESKDV 404
 DB 458 DRADLAKYICENQDISISKLECCCKEPILEKSHCIAVENDEMPADLPBLADPVESKDV 517
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 QY 465 EFKPLVEEPQNIKONCELPQIGBYKFGONALLVYTKKVPQVSTPTLVESRNIGKVS 524
 DB 578 EFKPLVEEPQNIKONCELPQIGBYKFGONALLVYTKKVPQVSTPTLVESRNIGKVS 637
 QY 525 KCCKPEAKRMPCAEDYLSVINQLCVLHEKTPVSDRVTKCTESLVNRRPFSALVEDE 584
 DB 638 KCCKPEAKRMPCAEDYLSVINQLCVLHEKTPVSDRVTKCTESLVNRRPFSALVEDE 697
 QY 585 TVPKERFNAETFPHADICTLSEKERQIKKOTALVAVLHGKPKATKQOLKAVMDPEAFV 644
 DB 698 TVPKERFNAETFPHADICTLSEKERQIKKOTALVAVLHGKPKATKQOLKAVMDPEAFV 757
 QY 645 EKCKRADDKETCFABERGGKLVAAASQNALGL 674
 DB 758 EKCKRADDKETCFABERGGKLVAAASQNALGL 787

RESULT 4
 US-09-976-594-977
 ; Sequence 977, Application US/09976594
 ; Patent No. 6673549
 ; GENERAL INFORMATION:
 ; APPLICANT: Funness, Michael
 ; Applicant: Buchinder, Jenny
 ; TITLE OF INVENTION: GENES EXPRESSED IN C3A LIVER CELL CULTURES TREATED WITH STEROIDS
 ; FILE REFERENCE: PA-0041 US
 ; CURRENT APPLICATION NUMBER: US/09/976,594
 ; CURRENT FILING DATE: 2001-10-12
 ; PRIOR APPLICATION NUMBER: 60/240,409
 ; PRIOR FILING DATE: 2000-10-12
 ; NUMBER OF SEQ ID NOS: 1143
 ; SOFTWARE: PERL Program
 ; SEQ ID NO 977
 ; LENGTH: 609
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; OTHER INFORMATION: Incyte ID No. 6673549 088957CD1
 ; US-09-976-594-977

Query Match 87.1%; Score 3108; DB 2; Length 609;
 Best Local Similarity 100.0%; Pred. No. 4.1e-279;
 Matches 586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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 DB 24 RDAHKEVVAHRPFQDLGEBNFKALVLIAPAGYIQQCPPEHDVKLVNVTBPAKTCVADSEA 83
 QY 149 ENCDKSLHTLFGDKLCTVATLRTYGMADCCAKQPERNECFLOHKDNDPNI.PRLVPR 208
 DB 84 ENCDKSLHTLFGDKLCTVATLRTYGMADCCAKQPERNECFLOHKDNDPNI.PRLVPR 143
 QY 209 VDVWCTAFHNDERTPLKXYLYEIAARRHPYFVABELLFFPAKRYKAAPTECCQAADKAACL 268
 DB 144 VDVWCTAFHNDERTPLKXYLYEIAARRHPYFVABELLFFPAKRYKAAPTECCQAADKAACL 203
 QY 269 PKLDLDEBEGKASSAKQRLKCAASLQKFGBRAPKAWAVARLSQRPKAEFAEVSKLVTDLT 328
 DB 204 PKLDLDEBEGKASSAKQRLKCAASLQKFGBRAPKAWAVARLSQRPKAEFAEVSKLVTDLT 263

QY 329 KYHTCCGHDLLIECADDRADLAKYICENODSISSKLKECCERPLELEKSHCIAEVENDEMP 388
 DB 264 KYHTCCGHDLLIECADDRADLAKYICENODSISSKLKECCERPLELEKSHCIAEVENDEMP 323
 QY 389 ADLPSLAADPVESKQVCKQVYAEAKDVFGLMFLYEYARRHPDYSVLLLRRLAKTYETTLK 448
 DB 324 ADLPSLAADPVESKQVCKQVYAEAKDVFGLMFLYEYARRHPDYSVLLLRRLAKTYETTLK 383
 QY 449 CCAAADPHRCYAKVDFEFPFLVEBPONLTKONCELEPEOLGEYKFORALLVRYTKKVPQVS 508
 DB 384 CCAAADPHRCYAKVDFEFPFLVEBPONLTKONCELEPEOLGEYKFORALLVRYTKKVPQVS 443
 QY 509 TPTLVEVSNLKGVSCKCKHPBEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCCCTE 568
 DB 444 TPTLVEVSNLKGVSCKCKHPBEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCCCTE 503
 QY 569 SLVNRPPCSALEVDETYVPKFNAPETTFPHADICTLSEKEROIKKQTLVBLVYKHKRPA 628
 DB 504 SLVNRPPCSALEVDETYVPKFNAPETTFPHADICTLSEKEROIKKQTLVBLVYKHKRPA 563
 QY 629 TKEQLKAVWDDPFAAFVEKCKADDKETCPAEBGSKLVAASQAALGL 674
 DB 564 TKEQLKAVWDDPFAAFVEKCKADDKETCPAEBGSKLVAASQAALGL 609

RESULT 5
 US-09-919-039-370
 ; Sequence 370, Application US/09919039
 ; Patent No. 6727066
 ; GENERAL INFORMATION:
 ; APPLICANT: Kaser, Matthew R.
 ; TITLE OF INVENTION: GENES EXPRESSED IN TREATED HUMAN C3A LIVER CELL CULTURES
 ; FILE REFERENCE: PA-0035 US
 ; CURRENT FILING DATE: 2002-09-09
 ; PRIOR APPLICATION NUMBER: 60/222,113
 ; PRIOR FILING DATE: 2000-07-28
 ; NUMBER OF SEQ ID NOS: 401
 ; SOFTWARE: PERL Program
 ; SEQ ID NO 370
 ; LENGTH: 609
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; OTHER INFORMATION: Inctye ID No. 6727066 088957CD1
 ; US-09-919-039-370

Query Match 87.1%; Score 3108; DB 2; Length 609;
 Best Local Similarity 100.0%; Pced. No. 4,1e-279;
 Matches 586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 89 RDAHKSEVAHREKDLGEBNFKALVLTAFAYLQCCPEPDHVKLVNEVTEPAKTCVADDESA 148
 DB 24 RDAHKSEVAHREKDLGEBNFKALVLTAFAYLQCCPEPDHVKLVNEVTEPAKTCVADDESA 83
 QY 149 ENCDKSIHLTLFGDKICTVATLRTYGEAMDCCAKOBERNEGTLQHKDNDPMLPRLVRE 208
 DB 84 ENCDKSIHLTLFGDKICTVATLRTYGEAMDCCAKOBERNEGTLQHKDNDPMLPRLVRE 143
 QY 209 VDVWVCAFPDNEETFLKXLYIETARRHPYFVABELLFPAKRYKAATTECCQAADKAACL 268
 DB 144 VDVWVCAFPDNEETFLKXLYIETARRHPYFVABELLFPAKRYKAATTECCQAADKAACL 203
 QY 269 PKLDELIRDEGKASSAKORLKCASLQKFGERRAFAMAVARLSORFPRAEPAVSKLVTDLT 328
 DB 204 PKLDELIRDEGKASSAKORLKCASLQKFGERRAFAMAVARLSORFPRAEPAVSKLVTDLT 263
 QY 329 KYHTCCGHDLLIECADDRADLAKYICENODSISSKLKECCERPLELEKSHCIAEVENDEMP 388
 DB 264 KYHTCCGHDLLIECADDRADLAKYICENODSISSKLKECCERPLELEKSHCIAEVENDEMP 323

QY 389 ADLPSLAADPVESKQVCKQVYAEAKDVFGLMFLYEYARRHPDYSVLLLRRLAKTYETTLK 448
 DB 324 ADLPSLAADPVESKQVCKQVYAEAKDVFGLMFLYEYARRHPDYSVLLLRRLAKTYETTLK 383
 QY 449 CCAAADPHRCYAKVDFEFPFLVEBPONLTKONCELEPEOLGEYKFORALLVRYTKKVPQVS 508
 DB 384 CCAAADPHRCYAKVDFEFPFLVEBPONLTKONCELEPEOLGEYKFORALLVRYTKKVPQVS 443
 QY 509 TPTLVEVSNLKGVSCKCKHPBEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCCCTE 568
 DB 444 TPTLVEVSNLKGVSCKCKHPBEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCCCTE 503
 QY 569 SLVNRPPCSALEVDETYVPKFNAPETTFPHADICTLSEKEROIKKQTLVBLVYKHKRPA 628
 DB 504 SLVNRPPCSALEVDETYVPKFNAPETTFPHADICTLSEKEROIKKQTLVBLVYKHKRPA 563
 QY 629 TKEQLKAVWDDPFAAFVEKCKADDKETCPAEBGSKLVAASQAALGL 674
 DB 564 TKEQLKAVWDDPFAAFVEKCKADDKETCPAEBGSKLVAASQAALGL 609

RESULT 6
 US-08-797-689-2
 ; Sequence 2, Application US/08797689
 ; Patent No. 5876969
 ; GENERAL INFORMATION:
 ; APPLICANT: Fleer, Reinhard
 ; APPLICANT: Fournier, Alain
 ; APPLICANT: Guitton, Jean-Dominique
 ; APPLICANT: Jung, Gerard
 ; APPLICANT: Yeh, Patrice
 ; TITLE OF INVENTION: NOVEL BIOLOGICALLY ACTIVE POLYPEPTIDES,
 ; PREPARATION THEREOF AND PHARMACEUTICAL COMPOSITION
 ; TITLE OF INVENTION: CONTAINING SAID POLYPEPTIDES
 ; NUMBER OF SEQUENCES: 36
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Rhone-Poulenc Rorer Inc.
 ; STREET: 500 Atcola Road, 3C43
 ; CITY: Collegeville
 ; STATE: PA
 ; COUNTRY: USA
 ; ZIP: 19426
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: Macintosh
 ; OPERATING SYSTEM: System 7.1
 ; SOFTWARE: Word 5.1 (Patentlin)
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/797,689
 ; FILING DATE: 31-JAN-1997
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/256,927
 ; FILING DATE: 28-JUL-1994
 ; APPLICATION NUMBER: FR 92/01064
 ; FILING DATE: 31-JAN-1992
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: PCT/FR93/00085
 ; FILING DATE: 28-JAN-1993
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Smith Ph.D., Julie K.
 ; REGISTRATION NUMBER: P-38,619
 ; REFERENCE/DOCKET NUMBER: ST922006-US
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (610) 454-3839
 ; TELEFAX: (610) 454-3808
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 610 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULAR TYPE: protein
 ; US-08-797-689-2

Query Match 87.1%; Score 3108; DB 1; Length 610; Best Local Similarity 100.0%; Pred. No. 4,1e-279; Indels 0; Gaps 0; Matches 586; Conservative 0; Mismatches 0;

Table with 4 columns: ID, Accession, Description, and Score. Rows include entries like 89 RDAHKSEV... and 24 RDAHKSEV... with various accession numbers and scores.

RESULT 7

US-09-984-186-2
Sequence 2, Application US/09984186
Patent No. 6686179
GENERAL INFORMATION:
APPLICANT: Pleer, Reinhard
Fournier, Alain
Guitton, Jean-Dominique
Jung, Gerard
Yeh, Patricia

Table with 4 columns: ID, Accession, Description, and Score. Rows include entries like 89 RDAHKSEV... and 24 RDAHKSEV... with various accession numbers and scores.

US-09-984-186-2
Sequence 2, Application US/09984186
Patent No. 6686179
GENERAL INFORMATION:
APPLICANT: Pleer, Reinhard
Fournier, Alain
Guitton, Jean-Dominique
Jung, Gerard
Yeh, Patricia

RESULT 8
 US-09-949-016-11170 ; Application US/09949016
 ; Sequence 11170, Patent No. 6812339
 ; GENERAL INFORMATION:
 ; APPLICANT: VENTER, J. Crais et al.
 ; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
 ; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
 ; FILE REFERENCE: CL001307
 ; CURRENT APPLICATION NUMBER: US/09/949,016
 ; CURRENT FILING DATE: 2000-04-14
 ; PRIORITY FILING DATE: 2000-04-14
 ; PRIORITY FILING DATE: 2000-10-20
 ; PRIORITY FILING DATE: 2000-10-20
 ; PRIORITY FILING DATE: 2000-10-03
 ; PRIORITY FILING DATE: 2000-09-08
 ; NUMBER OF SEQ ID NOS: 207012
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 11170
 ; LENGTH: 622
 ; TYPE: PRT
 ; ORGANISM: Human
 ; US-09-949-016-11170

Query Match 87.1%; Score 3108; DB 2; Length 622;
 Best Local Similarity 100.0%; Pred. No. 4,2e-279;
 Matches 586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

89 RDAHSEVAHRRFDLGEENFKALVLIARFQYIQCCPFEDHVKLVNEVTEFAKTCVADESA 148
 |||
 |||
 37 RAAHSEVAHRRFDLGEENFKALVLIARFQYIQCCPFEDHVKLVNEVTEFAKTCVADESA 96
 |||
 |||
 149 ENCDKSLHTLFDGKLCCTVATLRETYGEMADCCAKOBERNECFLOHKDNPMLPRLVRE 208
 |||
 |||
 97 ENCDKSLHTLFDGKLCCTVATLRETYGEMADCCAKOBERNECFLOHKDNPMLPRLVRE 156
 |||
 |||
 209 VDMCTAFHNDNEETFLKLYEIVARRHPYFVAPPELLFFAKRYKAAFTTECCQAADKAACL 268
 |||
 |||
 157 VDMCTAFHNDNEETFLKLYEIVARRHPYFVAPPELLFFAKRYKAAFTTECCQAADKAACL 216
 |||
 |||
 269 PKLDELRLDDEGKASSAKORLKCASLQKFGERRAKAVANALSORPFAEFAVSKLVTDLT 328
 |||
 |||
 217 PKLDELRLDDEGKASSAKORLKCASLQKFGERRAKAVANALSORPFAEFAVSKLVTDLT 276
 |||
 |||
 329 KYHTCCCHGDLLECADDRADLAKYICENODSISSKLKECCERPLLEKSHCIAEVENDEMP 388
 |||
 |||
 277 KYHTCCCHGDLLECADDRADLAKYICENODSISSKLKECCERPLLEKSHCIAEVENDEMP 336
 |||
 |||
 389 ADLPSLAADFVSKDVKCNVYAEAKDVFGLGMFLYEYARRHPDYSVVLRLAKTYETTLEK 448
 |||
 |||
 337 ADLPSLAADFVSKDVKCNVYAEAKDVFGLGMFLYEYARRHPDYSVVLRLAKTYETTLEK 396
 |||
 |||
 449 CCAAADPHECYAKVDFEFPKLVVEEPONLIKONCELFEOUGEYKFNALLVRYTKKVPQVS 508
 |||
 |||
 397 CCAAADPHECYAKVDFEFPKLVVEEPONLIKONCELFEOUGEYKFNALLVRYTKKVPQVS 456
 |||
 |||
 509 TPTLVEVSNLIGKVGSKCCGHPRAKAMPKAEEDYLSVVLNOLCVLHKHTPVSDEVTCCCTE 568
 |||
 |||
 457 TPTLVEVSNLIGKVGSKCCGHPRAKAMPKAEEDYLSVVLNOLCVLHKHTPVSDEVTCCCTE 516
 |||
 |||
 569 SLVNRPPCFSALEVDSTVYVPEKFNAAETFTFHADICTLSEKERQIKKQTLVVELVKKRPKA 628
 |||
 |||
 517 SLVNRPPCFSALEVDSTVYVPEKFNAAETFTFHADICTLSEKERQIKKQTLVVELVKKRPKA 576
 |||
 |||
 629 TKEQLKAVVNDPFAAFVEKCCAKDKKETCFEAEBEGSKLVVAASQAALGL 674
 |||
 |||
 577 TKEQLKAVVNDPFAAFVEKCCAKDKKETCFEAEBEGSKLVVAASQAALGL 622
 |||
 |||

RESULT 9
 US-08-256-938-2
 ; Sequence 2, Application US/08256938

Patent No. 5665863
 ; GENERAL INFORMATION:
 ; APPLICANT: Yeh, Patrice
 ; TITLE OF INVENTION: NEW POLYPEPTIDES HAVING GRANULOCYTE
 ; TITLE OF INVENTION: COLONY STIMULATING ACTIVITY, PREPARATION THEREOF AND
 ; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING SAID POLYPEPTIDES
 ; NUMBER OF SEQUENCES: 12
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSER: Rhone-poulenc Rorer Inc.
 ; STREET: 500 Arcola Road, 3C43
 ; CITY: Collegeville
 ; STATE: PA
 ; COUNTRY: USA
 ; ZIP: 19426
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: Macintosh
 ; OPERATING SYSTEM: System 7.1
 ; SOFTWARE: Word 5.0 (PatentIn)
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/256,938
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; PRIORITY APPLICATION DATA:
 ; APPLICATION NUMBER: FR 92/01065
 ; FILING DATE: 31-JAN-1992
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Goodman, Rosanne
 ; REGISTRATION NUMBER: 32,534
 ; REFERENCE/DOCKET NUMBER: ST92007-US
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (610) 454-3817
 ; TELEFAX: (610) 454-3808
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 783 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; US-08-256-938-2

Query Match 87.1%; Score 3108; DB 1; Length 783;
 Best Local Similarity 100.0%; Pred. No. 6e-279;
 Matches 586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

89 RDAHSEVAHRRFDLGEENFKALVLIARFQYIQCCPFEDHVKLVNEVTEFAKTCVADESA 148
 |||
 |||
 24 RAAHSEVAHRRFDLGEENFKALVLIARFQYIQCCPFEDHVKLVNEVTEFAKTCVADESA 83
 |||
 |||
 149 ENCDKSLHTLFDGKLCCTVATLRETYGEMADCCAKOBERNECFLOHKDNPMLPRLVRE 208
 |||
 |||
 84 ENCDKSLHTLFDGKLCCTVATLRETYGEMADCCAKOBERNECFLOHKDNPMLPRLVRE 143
 |||
 |||
 209 VDMCTAFHNDNEETFLKLYEIVARRHPYFVAPPELLFFAKRYKAAFTTECCQAADKAACL 268
 |||
 |||
 144 VDMCTAFHNDNEETFLKLYEIVARRHPYFVAPPELLFFAKRYKAAFTTECCQAADKAACL 203
 |||
 |||
 269 PKLDELRLDDEGKASSAKORLKCASLQKFGERRAKAVANALSORPFAEFAVSKLVTDLT 328
 |||
 |||
 204 PKLDELRLDDEGKASSAKORLKCASLQKFGERRAKAVANALSORPFAEFAVSKLVTDLT 263
 |||
 |||
 329 KYHTCCCHGDLLECADDRADLAKYICENODSISSKLKECCERPLLEKSHCIAEVENDEMP 388
 |||
 |||
 264 KYHTCCCHGDLLECADDRADLAKYICENODSISSKLKECCERPLLEKSHCIAEVENDEMP 323
 |||
 |||
 389 ADLPSLAADFVSKDVKCNVYAEAKDVFGLGMFLYEYARRHPDYSVVLRLAKTYETTLEK 448
 |||
 |||
 324 ADLPSLAADFVSKDVKCNVYAEAKDVFGLGMFLYEYARRHPDYSVVLRLAKTYETTLEK 383
 |||
 |||
 449 CCAAADPHECYAKVDFEFPKLVVEEPONLIKONCELFEOUGEYKFNALLVRYTKKVPQVS 508
 |||
 |||
 384 CCAAADPHECYAKVDFEFPKLVVEEPONLIKONCELFEOUGEYKFNALLVRYTKKVPQVS 443
 |||
 |||

QY 509 TPTLVEVSRNLTGKVGSKCCCKHPBAKRMPCABDYLSVVLNQLCVLHKEKTPVSDRVTKCCCTE 568
 |||||
 DB 444 TPTLVEVSRNLTGKVGSKCCCKHPBAKRMPCABDYLSVVLNQLCVLHKEKTPVSDRVTKCCCTE 503
 QY 569 SLVNRPPCFSALEVDDETYVPKPEFNAETFTFHADICTLSEKERQIKKQFALVELVYKRPVA 628
 DB 504 SLVNRPPCFSALEVDDETYVPKPEFNAETFTFHADICTLSEKERQIKKQFALVELVYKRPVA 563
 QY 629 TKEQLKAVMDPDAAPFVEKCCCKADDKETCPAEBGKLVVAASQAALGL 674
 DB 564 TKEQLKAVMDPDAAPFVEKCCCKADDKETCPAEBGKLVVAASQAALGL 609

RESULT 10
 US-08-222-619-3
 ; Sequence 3, Application US/08222619
 ; Patent No. 5652352
 ; GENERAL INFORMATION:
 ; APPLICANT: Lichenstein, Henri
 ; APPLICANT: Lyons, David
 ; APPLICANT: Wirtel, Mark
 ; APPLICANT: Wright, Samuel
 ; TITLE OF INVENTION: Afamin: A Human Serum Albumin-like
 ; NUMBER OF SEQUENCES: 33
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESS: Amgen Center, Patent Operations/RRC
 ; STREET: 1840 DeHavilland Drive
 ; CITY: Thousand Oaks
 ; STATE: California
 ; COUNTRY: U.S.
 ; ZIP: 91320-1789
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; OPERATING SYSTEM: IBM PC compatible
 ; SOFTWARE: Patent Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/222,619
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; INFORMATION FOR SEQ ID NO: 3:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 609 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: unknown
 ; TOPOLOGY: unknown
 ; MOLECULE TYPE: protein
 ; US-08-222-619-3

Query Match 87.0%; Score 3104; DB 1; Length 609;
 Best Local Similarity 99.8%; Pred. No. 9.6e-279;
 Matches 585; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 89 RDAHKSEVARRPFDLGEENFKALVLIAPAOYLQCCPEDEHVKLVNVTETPAKTCVADESA 148
 |||||
 DB 24 RDAHKSEVARRPFDLGEENFKALVLIAPAOYLQCCPEDEHVKLVNVTETPAKTCVADESA 83
 QY 149 ENCDKSLHTLFGDKLCTVATLRETYYGEMADCCAKQEBERNECFLOHDDNPNLPRLVPE 208
 DB 84 ENCDKSLHTLFGDKLCTVATLRETYYGEMADCCAKQEBERNECFLOHDDNPNLPRLVPE 143
 QY 209 VDVWCTAFHNDNETFLKLYEIRARRHPYFAPPELLFPKRYKAAFTFCCQADKAAACL 268
 DB 144 VDVWCTAFHNDNETFLKLYEIRARRHPYFAPPELLFPKRYKAAFTFCCQADKAAACL 203
 QY 269 PKLDELADDEKASAKRILKASLQKGEBAFKMAVAARLSORPKAPAVSKLVTDLT 328
 DB 204 PKLDELADDEKASAKRILKASLQKGEBAFKMAVAARLSORPKAPAVSKLVTDLT 263
 QY 329 KVHTTECHGDLLECADRADLAKYICENODSISSEKLECCCKPLLEKSHCIAVYENDEMP 388
 DB 264 KVHTTECHGDLLECADRADLAKYICENODSISSEKLECCCKPLLEKSHCIAVYENDEMP 323

QY 389 ADLPSIAADFVSEKDVCKKVAEAKDVFLEGMFLYBYARRHPDYSVVLRLAATYETTLLEK 448
 |||||
 DB 324 ADLPSIAADFVSEKDVCKKVAEAKDVFLEGMFLYBYARRHPDYSVVLRLAATYETTLLEK 383
 QY 449 CCAAADPHECVAKVDEPFPVLEBPONLIKONCELPFOUGEFKFPONALLVRYTKKVPQVS 508
 DB 384 CCAAADPHECVAKVDEPFPVLEBPONLIKONCELPFOUGEFKFPONALLVRYTKKVPQVS 443
 QY 509 TPTLVEVSRNLTGKVGSKCCCKHPBAKRMPCABDYLSVVLNQLCVLHKEKTPVSDRVTKCCCTE 568
 |||||
 DB 444 TPTLVEVSRNLTGKVGSKCCCKHPBAKRMPCABDYLSVVLNQLCVLHKEKTPVSDRVTKCCCTE 503
 QY 569 SLVNRPPCFSALEVDDETYVPKPEFNAETFTFHADICTLSEKERQIKKQFALVELVYKRPVA 628
 DB 504 SLVNRPPCFSALEVDDETYVPKPEFNAETFTFHADICTLSEKERQIKKQFALVELVYKRPVA 563
 QY 629 TKEQLKAVMDPDAAPFVEKCCCKADDKETCPAEBGKLVVAASQAALGL 674
 DB 564 TKEQLKAVMDPDAAPFVEKCCCKADDKETCPAEBGKLVVAASQAALGL 609

RESULT 11
 US-08-433-037-4
 ; Sequence 4, Application US/08433037
 ; Patent No. 5707828
 ; GENERAL INFORMATION:
 ; APPLICANT: Sreekrishna, Korikanyadan
 ; APPLICANT: Barr, Kathryn A.
 ; APPLICANT: Briarley, Russell A.
 ; APPLICANT: Thill, Gregory P.
 ; APPLICANT: Teschop, Juerg P.
 ; TITLE OF INVENTION: EXPRESSION OF HUMAN SERUM ALBUMIN IN
 ; NUMBER OF SEQUENCES: 19
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESS: Scully, Scott, Murphy & Presser
 ; STREET: 400 Garden City Plaza
 ; CITY: Garden City
 ; STATE: New York
 ; COUNTRY: U.S.A.
 ; ZIP: 11530-0299
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; OPERATING SYSTEM: IBM PC compatible
 ; SOFTWARE: Patent Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/433,037
 ; FILING DATE: 03-MAY-1995
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: DIGIGILLO, Frank S.
 ; REGISTRATION NUMBER: 31,346
 ; REFERENCE/DOCKET NUMBER: 9108Z
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (516) 742-4343
 ; TELEFAX: (516) 742-4366
 ; TELEX: 230 901 SANS UR
 ; INFORMATION FOR SEQ ID NO: 4:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 609 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; US-08-433-037-4

Query Match 87.0%; Score 3104; DB 1; Length 609;
 Best Local Similarity 99.8%; Pred. No. 9.6e-279;
 Matches 585; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 89 RDAHKSEVARRPFDLGEENFKALVLIAPAOYLQCCPEDEHVKLVNVTETPAKTCVADESA 148
 |||||
 DB 24 RDAHKSEVARRPFDLGEENFKALVLIAPAOYLQCCPEDEHVKLVNVTETPAKTCVADESA 83
 QY 149 ENCDKSLHTLFGDKLCTVATLRETYYGEMADCCAKQEBERNECFLOHDDNPNLPRLVPE 208
 DB 84 ENCDKSLHTLFGDKLCTVATLRETYYGEMADCCAKQEBERNECFLOHDDNPNLPRLVPE 143
 QY 209 VDVWCTAFHNDNETFLKLYEIRARRHPYFAPPELLFPKRYKAAFTFCCQADKAAACL 268
 DB 144 VDVWCTAFHNDNETFLKLYEIRARRHPYFAPPELLFPKRYKAAFTFCCQADKAAACL 203
 QY 269 PKLDELADDEKASAKRILKASLQKGEBAFKMAVAARLSORPKAPAVSKLVTDLT 328
 DB 204 PKLDELADDEKASAKRILKASLQKGEBAFKMAVAARLSORPKAPAVSKLVTDLT 263
 QY 329 KVHTTECHGDLLECADRADLAKYICENODSISSEKLECCCKPLLEKSHCIAVYENDEMP 388
 DB 264 KVHTTECHGDLLECADRADLAKYICENODSISSEKLECCCKPLLEKSHCIAVYENDEMP 323

Db 24 RDAHSEVAHRRFKDVGSENFKALVLIAPAOYLQCCPFBDHVKLVNEVTEPAKTCVADESA 83
 Qy 149 ENCDSKSIHTLFGDKLCTVATLRETYGEMADCCAKOBERNEGFLQHKDNDPMLPRLVRE 208
 Db 84 ENCDSKSIHTLFGDKLCTVATLRETYGEMADCCAKOBERNEGFLQHKDNDPMLPRLVRE 143
 Qy 209 VDVMTCTAHDNEBETFLKRYLIEIARRHRYFAAPBELLFPAKRYKAAPTECCOAAADKAACL 268
 Db 144 VDVMTCTAHDNEBETFLKRYLIEIARRHRYFAAPBELLFPAKRYKAAPTECCOAAADKAACL 203
 Qy 269 PKLDELRLDGRKASSAKORLKCASLQKFGERRAFKAWAVARLSQRFPKAEFAVSKLVTDLT 328
 Db 204 PKLDELRLDGRKASSAKORLKCASLQKFGERRAFKAWAVARLSQRFPKAEFAVSKLVTDLT 263
 Qy 329 KYHTCECHGDILLECADDRADLAKYICENODSISSKLKECCERPLIEKSHCIAEVENDEMP 388
 Db 264 KYHTCECHGDILLECADDRADLAKYICENODSISSKLKECCERPLIEKSHCIAEVENDEMP 323
 Qy 389 ADLPSIAADFPVSKVCKVYAEAKDVFGLMFLYEYARRHRYSVVLLRLAKTYETTLTK 448
 Db 324 ADLPSIAADFPVSKVCKVYAEAKDVFGLMFLYEYARRHRYSVVLLRLAKTYETTLTK 383
 Qy 449 CCAAADPHRCYAKVDFEFPKPLVEEPONLIKONCELFQDGEYKFPONALLVRYTKKVPQVS 508
 Db 384 CCAAADPHRCYAKVDFEFPKPLVEEPONLIKONCELFQDGEYKFPONALLVRYTKKVPQVS 443
 Qy 509 TPTLVEVSRLGKVGSKCKKHPBAKMPCAEDYLSVVLNQLCVLHEKTPVSDRYTKCCTE 568
 Db 444 TPTLVEVSRLGKVGSKCKKHPBAKMPCAEDYLSVVLNQLCVLHEKTPVSDRYTKCCTE 503
 Qy 569 SIVNRRPFCFSALEVDETYVPKPEFNAETFTPHADICTLSEKROIKKQALVELVGHKRPKA 628
 Db 504 SIVNRRPFCFSALEVDETYVPKPEFNAETFTPHADICTLSEKROIKKQALVELVGHKRPKA 563
 Qy 629 TKEQLKAWMDPFAAFVFKCCCKADDKETCFABEGSKLVAAASQAAALGL 674
 Db 564 TKEQLKAWMDPFAAFVFKCCCKADDKETCFABEGSKLVAAASQAAALGL 609

RESULT 12

US-08-897-956A-2
 / Sequence 2, Application US/08897956A
 / Patent No. 6423512
 / GENERAL INFORMATION:
 / APPLICANT: Mary Ellen Digan
 / APPLICANT: Philip Lake
 / APPLICANT: Hermann Gram
 / TITLE OF INVENTION: Fusion Polypeptides
 / FILE REFERENCE: 600-7244/CPA
 / CURRENT APPLICATION NUMBER: US/08/897,956A
 / PRIORITY FILING DATE: 1997-07-21
 / PRIOR APPLICATION NUMBER: 60/022,689
 / PRIOR FILING DATE: 1996-07-26
 / NUMBER OF SEQ ID NOS: 38
 / SOFTWARE: FASTSEQ for windows version 4.0
 / SEQ ID NO 2
 / LENGTH: 609
 / TYPE: PRT
 / ORGANISM: Homo Sapiens
 / US-08-897-956A-2

Query Match 87.0%; Score 3104; DB 2; Length 609;
 Best Local Similarity 99.8%; Pred. No. 9,6e-279;
 Matches 585; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 89 RDAHSEVAHRRFKDVGSENFKALVLIAPAOYLQCCPFBDHVKLVNEVTEPAKTCVADESA 148
 Db 24 RDAHSEVAHRRFKDVGSENFKALVLIAPAOYLQCCPFBDHVKLVNEVTEPAKTCVADESA 83
 Qy 149 ENCDSKSIHTLFGDKLCTVATLRETYGEMADCCAKOBERNEGFLQHKDNDPMLPRLVRE 208
 Db 84 ENCDSKSIHTLFGDKLCTVATLRETYGEMADCCAKOBERNEGFLQHKDNDPMLPRLVRE 143

Qy 209 VDVMTCTAHDNEBETFLKRYLIEIARRHRYFAAPBELLFPAKRYKAAPTECCOAAADKAACL 268
 Db 144 VDVMTCTAHDNEBETFLKRYLIEIARRHRYFAAPBELLFPAKRYKAAPTECCOAAADKAACL 203
 Qy 269 PKLDELRLDGRKASSAKORLKCASLQKFGERRAFKAWAVARLSQRFPKAEFAVSKLVTDLT 328
 Db 204 PKLDELRLDGRKASSAKORLKCASLQKFGERRAFKAWAVARLSQRFPKAEFAVSKLVTDLT 263
 Qy 329 KYHTCECHGDILLECADDRADLAKYICENODSISSKLKECCERPLIEKSHCIAEVENDEMP 388
 Db 264 KYHTCECHGDILLECADDRADLAKYICENODSISSKLKECCERPLIEKSHCIAEVENDEMP 323
 Qy 389 ADLPSIAADFPVSKVCKVYAEAKDVFGLMFLYEYARRHRYSVVLLRLAKTYETTLTK 448
 Db 324 ADLPSIAADFPVSKVCKVYAEAKDVFGLMFLYEYARRHRYSVVLLRLAKTYETTLTK 383
 Qy 449 CCAAADPHRCYAKVDFEFPKPLVEEPONLIKONCELFQDGEYKFPONALLVRYTKKVPQVS 508
 Db 384 CCAAADPHRCYAKVDFEFPKPLVEEPONLIKONCELFQDGEYKFPONALLVRYTKKVPQVS 443
 Qy 509 TPTLVEVSRLGKVGSKCKKHPBAKMPCAEDYLSVVLNQLCVLHEKTPVSDRYTKCCTE 568
 Db 444 TPTLVEVSRLGKVGSKCKKHPBAKMPCAEDYLSVVLNQLCVLHEKTPVSDRYTKCCTE 503
 Qy 569 SIVNRRPFCFSALEVDETYVPKPEFNAETFTPHADICTLSEKROIKKQALVELVGHKRPKA 628
 Db 504 SIVNRRPFCFSALEVDETYVPKPEFNAETFTPHADICTLSEKROIKKQALVELVGHKRPKA 563
 Qy 629 TKEQLKAWMDPFAAFVFKCCCKADDKETCFABEGSKLVAAASQAAALGL 674
 Db 564 TKEQLKAWMDPFAAFVFKCCCKADDKETCFABEGSKLVAAASQAAALGL 609

RESULT 13

PCT-US95-04075-3
 / Sequence 3, Application PC/TUS9504075
 / GENERAL INFORMATION:
 / APPLICANT: AMGEN INC.
 / TITLE OF INVENTION: Afamin: A Human Serum Albumin-Like
 / TITLE OF INVENTION: Protein
 / NUMBER OF SEQUENCES: 33
 / CORRESPONDENCE ADDRESS:
 / ADDRESSEE: Amgen Center, Patent Operations/RRC
 / STREET: 1840 DeHavilland Drive
 / CITY: Thousand Oaks
 / STATE: California
 / COUNTRY: U.S.
 / ZIP: 91320-1769
 / COMPUTER READABLE FORM:
 / MEDIUM TYPE: Floppy disk
 / COMPUTER: IBM PC compatible
 / OPERATING SYSTEM: PC-DOS/MS-DOS
 / SOFTWARE: PatentIn Release #1.0, Version #1.25
 / CURRENT APPLICATION DATA:
 / APPLICATION NUMBER: PCT/US95/04075
 / FILING DATE:
 / CLASSIFICATION:
 / INFORMATION FOR SEQ ID NO: 3:
 / SEQUENCE CHARACTERISTICS:
 / LENGTH: 609 amino acids
 / TYPE: amino acid
 / STRANDEDNESS: unknown
 / TOPOLOGY: unknown
 / MOLECULE TYPE: protein
 / PCT-US95-04075-3

Query Match 87.0%; Score 3104; DB 4; Length 609;
 Best Local Similarity 99.8%; Pred. No. 9,6e-279;
 Matches 585; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 89 RDAHSEVAHRRFKDVGSENFKALVLIAPAOYLQCCPFBDHVKLVNEVTEPAKTCVADESA 148
 Db 24 RDAHSEVAHRRFKDVGSENFKALVLIAPAOYLQCCPFBDHVKLVNEVTEPAKTCVADESA 83

QY 149 ENGDKSLHTLFGDKLCTVAATLRTYEGEMADCCAKOBERNECFLOHKDDNPNLRLVRE 208
 DB 84 ENDDKSLHTLFGDKLCTVAATLRTYEGEMADCCAKOBERNECFLOHKDDNPNLRLVRE 143
 QY 209 VDVMTAFHNDNEETFLKRYLIEIARRHPYFAPABELLFFAKRYKAAPTECCOADAACA 268
 DB 144 VDVMTAFHNDNEETFLKRYLIEIARRHPYFAPABELLFFAKRYKAAPTECCOADAACA 203
 QY 269 PKLDELDRDEGKASSAKORLKCASIQKFGGERAFKAWAVARLSQRPPAEFAEYVSKLVTDLT 328
 DB 204 PKLDELDRDEGKASSAKORLKCASIQKFGGERAFKAWAVARLSQRPPAEFAEYVSKLVTDLT 263
 QY 329 KHTTECGHDLLEGADDRADLAKYICENODSISKLECCERKPLLEKSHCIA 388
 DB 264 KHTTECGHDLLEGADDRADLAKYICENODSISKLECCERKPLLEKSHCIA 323
 QY 389 ADLPSLAADPEESKDYCKNYAEAKDVFLEGMFLYEARHPDYVLLLRKAKTYEFTLLEK 448
 DB 324 ADLPSLAADPEESKDYCKNYAEAKDVFLEGMFLYEARHPDYVLLLRKAKTYEFTLLEK 383
 QY 449 CCAAADPHECYAKVDFEFPKPLVSEPPNLIKONCELFQOLGEYKFNALLVRYTKVPOVS 508
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 DB 444 TPTLVYSRNLGKVGSKCCGHPBAKMPCAEDYLSVNLQLCVLEHKTPTVSDRVTVCSE 503
 QY 569 SLVNRBPCFSALAEVDETYVKEFNAETFTFHADICTLSEKERQIKKOTALVELVKKPKPA 628
 DB 504 SLVNRBPCFSALAEVDETYVKEFNAETFTFHADICTLSEKERQIKKOTALVELVKKPKPA 563
 QY 629 TKEQLKAVMDPFAAFVEKCCAKADKCTCFABEGKGLVAASQAALG 674
 DB 564 TKEQLKAVMDPFAAFVEKCCAKADKCTCFABEGKGLVAASQAALG 609

RESULT 14
 US-08-897-956A-3
 ; Sequence 3, Application US/08897956A
 ; Patent No. 6423512
 ; GENERAL INFORMATION:
 ; APPLICANT: Mary Ellen Digan
 ; APPLICANT: Phillip Lake
 ; APPLICANT: Hermann Gram
 ; TITLE OF INVENTION: Fusion Polypeptides
 ; FILE REFERENCE: 600-7244/CPA
 ; CURRENT APPLICATION NUMBER: US/08/897,956A
 ; PRIORITY FILING DATE: 1997-07-21
 ; PRIOR APPLICATION NUMBER: 60/022,689
 ; NUMBER OF SEQ ID NOS: 38
 ; SOFTWARE: FASTSEQ for Windows Version 4.0
 ; SEQ ID NO 3
 ; LENGTH: 978
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Fusion polypeptide
 ; US-08-897-956A-3

Query Match 87.0%; Score 3103.5; DB 2; Length 978;
 Best Local Similarity 98.8%; Pred. No. 2.2e-278;
 Matches 586; Conservative 1; Mismatches 3; Indels 3; Gaps 1;

QY 84 WLK--GRDAHSEVAVHRRPDKGEENPKALVLAFAOYLQCCPEEDHVKLVNVEFEAK 140
 DB 203 WLASGGGSDAHKSEVAVHRRPDKGEENPKALVLAFAOYLQCCPEEDHVKLVNVEFEAK 262
 QY 141 TCVADEAENCDKSLHTLFGDKLCTVAATLRTYEGEMADCCAKOBERNECFLOHKDDNPN 200
 DB 263 TCVADEAENCDKSLHTLFGDKLCTVAATLRTYEGEMADCCAKOBERNECFLOHKDDNPN 322

QY 201 LRLVREVDVMTAFHNDNEETFLKRYLIEIARRHPYFAPABELLFFAKRYKAAPTECCO 260
 DB 323 LRLVREVDVMTAFHNDNEETFLKRYLIEIARRHPYFAPABELLFFAKRYKAAPTECCO 382
 QY 261 ADKAACTLDELDRDEGKASSAKORLKCASIQKFGGERAFKAWAVARLSQRPPAEFAE 320
 DB 383 ADKAACTLDELDRDEGKASSAKORLKCASIQKFGGERAFKAWAVARLSQRPPAEFAE 442
 QY 321 SKLVNVDLTKVHTTECGHDLLEGADDRADLAKYICENODSISKLECCERKPLLEKSHCIA 380
 DB 443 SKLVNVDLTKVHTTECGHDLLEGADDRADLAKYICENODSISKLECCERKPLLEKSHCIA 502
 QY 381 EYENDMPADLPSLAADPEESKDYCKNYAEAKDVFLEGMFLYEARHPDYVLLLRKAK 440
 DB 503 EYENDMPADLPSLAADPEESKDYCKNYAEAKDVFLEGMFLYEARHPDYVLLLRKAK 562
 QY 441 TYETLLEKCCAAADPHECYAKVDFEFPKPLVSEPPNLIKONCELFQOLGEYKFNALLVRY 500
 DB 563 TYETLLEKCCAAADPHECYAKVDFEFPKPLVSEPPNLIKONCELFQOLGEYKFNALLVRY 622
 QY 501 TKKVPOVSTPTLVYSRNLGKVGSKCCGHPBAKMPCAEDYLSVNLQLCVLEHKTPTVSD 560
 DB 623 TKKVPOVSTPTLVYSRNLGKVGSKCCGHPBAKMPCAEDYLSVNLQLCVLEHKTPTVSD 682
 QY 561 RYTKCCESLAVNRBPCFSALAEVDETYVKEFNAETFTFHADICTLSEKERQIKKOTALVE 620
 DB 683 RYTKCCESLAVNRBPCFSALAEVDETYVKEFNAETFTFHADICTLSEKERQIKKOTALVE 742
 QY 621 LVHKEKATKKEQLKAVMDPFAAFVEKCCAKADKCTCFABEGKGLVAASQAALG 673
 DB 743 LVHKEKATKKEQLKAVMDPFAAFVEKCCAKADKCTCFABEGKGLVAASQAALG 795

RESULT 15
 US-08-153-799-14
 ; Sequence 14, Application US/08153799
 ; Patent No. 5766883
 ; GENERAL INFORMATION:
 ; APPLICANT: Ballance, David J
 ; APPLICANT: Goodey, Andrew R
 ; TITLE OF INVENTION: Polypeptides
 ; NUMBER OF SEQUENCES: 23
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSER: R Hain Swope, BOC Health Care Inc
 ; STREET: 100 Mountain Avenue
 ; CITY: Murray Hill
 ; STATE: New Jersey
 ; COUNTRY: USA
 ; ZIP: 07974
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; OPERATING SYSTEM: IBM PC compatible
 ; SOFTWARE: Patent In Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/153,799
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/847975
 ; FILING DATE: 06-MAR-1992
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: GB 8909916.2
 ; FILING DATE: 29-APR-1989
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: PCT/GB90/00650
 ; FILING DATE: 26-APR-1990
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/775952
 ; FILING DATE: 29-OCT-1991
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Swope, R Hain

Job time : 44.6037 secs

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/ REGISTRATION NUMBER: 24864
/ REFERENCE/DOCKET NUMBER: 92H832
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (908) 665 2400
/ TELEFAX: (908) 771 6159
/ TELEX: 219484
/ INFORMATION FOR SEQ ID NO: 14:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 585 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ HYPOTHETICAL: NO
/ ORIGINAL SOURCE:
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: Region
/ LOCATION: 369..419
/ OTHER INFORMATION: /note= "Alternative C-termini of
/ OTHER INFORMATION: HSA(1-n)"
/ FEATURE:
/ NAME/KEY: Region
/ LOCATION: 1..585
/ OTHER INFORMATION: /note= "Amino acid sequence of
/ OTHER INFORMATION: natural HSA"
/
US-08-153-799-14

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Query Match Best Local Similarity 87.0%; Score 3103; DB 1; Length 585;

Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 90 DAHKSVAHRFKDLGSENFKALVLIIFAQYTLQCCPEPDHVKLVNEVTEFAKTCVADESAE 149
DB 1 DAHKSVAHRFKDLGSENFKALVLIIFAQYTLQCCPEPDHVKLVNEVTEFAKTCVADESAE 60
QY 150 NCDKSIHTLFGDKLCTVAITRETYGEMADCCAKQEPERNECFIQHKDDNPNLPRLVREPV 209
DB 61 NCDKSIHTLFGDKLCTVAITRETYGEMADCCAKQEPERNECFIQHKDDNPNLPRLVREPV 120
QY 210 DVMCTAFHNEERTFLKKYLYEIRRRHPYFAPPELLFPKRYKAAFTCCOAKKACLLP 269
DB 121 DVMCTAFHNEERTFLKKYLYEIRRRHPYFAPPELLFPKRYKAAFTCCOAKKACLLP 180
QY 270 KLDLDELDEGKASSAKORLKCASIQKFGGERAFKAMAAVARLSQRPKAEFAEVSRLVDTLK 329
DB 181 KLDLDELDEGKASSAKORLKCASIQKFGGERAFKAMAAVARLSQRPKAEFAEVSRLVDTLK 240
QY 330 VHTCCGHDLLFCADPRADLAKTICENODSISSKLKECCCKPLLEKSHCIAEVENDEMPA 389
DB 241 VHTCCGHDLLFCADPRADLAKTICENODSISSKLKECCCKPLLEKSHCIAEVENDEMPA 300
QY 390 DLPSLADPFVESHKDVCKNTVAEAKDVFLEMPLYEYARRHPDYSVLLLRILAKTYETTLK 449
DB 301 DLPSLADPFVESHKDVCKNTVAEAKDVFLEMPLYEYARRHPDYSVLLLRILAKTYETTLK 360
QY 450 CAAADPHECYAKVDFEKPVLVEEPONLIKONCELFEQLGEYKFNALIVRYTKKVPQVST 509
DB 361 CAAADPHECYAKVDFEKPVLVEEPONLIKONCELFEQLGEYKFNALIVRYTKKVPQVST 420
QY 510 PTLVEVSRNIGKTVGSKCKRPAKMPCAEDYLSVVIINQICVTHEKTPVSDRYTKCCTBS 569
DB 421 PTLVEVSRNIGKTVGSKCKRPAKMPCAEDYLSVVIINQICVTHEKTPVSDRYTKCCTBS 480
QY 570 LVNRRPCFSALREVDERTYVVPKEFNAFTTFHADICTLSEKERQIKKOTALVELYKHKPKAT 629
DB 481 LVNRRPCFSALREVDERTYVVPKEFNAFTTFHADICTLSEKERQIKKOTALVELYKHKPKAT 540
QY 630 KEQLKAVMDPFAAFVEKCKKADDKETCFABEGKGLVAASQAALGL 674
DB 541 KEQLKAVMDPFAAFVEKCKKADDKETCFABEGKGLVAASQAALGL 585

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GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 19, 2006, 12:29:13 ; Search time 142.172 Seconds
(without alignments)
1980.821 Million cell updates/sec

Title: US-10-775-180-447
Perfect score: 3568
Sequence: 1 MNIFYFLFLSPVQGLHRT.....TCFAERGGKLVAAASQAALGL 674

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-Processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA Main:
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2: /cgn2_6/prodata/1/pubppaa/us08_PUBCOMB.pep:*
3: /cgn2_6/prodata/1/pubppaa/us09_PUBCOMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3568	100.0	674	US-10-775-180-447	Sequence 447, App
2	3568	100.0	674	US-10-775-204-1280	Sequence 1280, App
3	3444.5	96.5	669	US-10-775-180-419	Sequence 419, App
4	3444.5	96.5	669	US-10-775-204-1231	Sequence 1231, App
5	3444.5	96.5	730	US-10-775-204-610	Sequence 610, App
6	3444.5	96.5	730	US-10-775-204-1622	Sequence 1622, App
7	3438.5	96.4	669	US-10-775-180-425	Sequence 425, App
8	3438.5	96.4	669	US-10-775-204-1237	Sequence 1237, App
9	3438	96.4	730	US-10-775-180-612	Sequence 612, App
10	3438	96.4	730	US-10-775-204-1624	Sequence 1624, App
11	3432.5	96.2	669	US-10-775-180-420	Sequence 420, App
12	3432.5	96.2	669	US-10-775-180-421	Sequence 421, App
13	3432.5	96.2	669	US-10-775-180-423	Sequence 423, App
14	3432.5	96.2	669	US-10-775-180-424	Sequence 424, App
15	3432.5	96.2	669	US-10-775-204-1232	Sequence 1232, App
16	3432.5	96.2	669	US-10-775-204-1233	Sequence 1233, App
17	3432.5	96.2	669	US-10-775-204-1235	Sequence 1235, App
18	3432.5	96.2	669	US-10-775-204-1236	Sequence 1236, App
19	3427	96.0	668	US-10-775-180-609	Sequence 609, App
20	3427	96.0	668	US-10-775-204-1621	Sequence 1621, App
21	3422	95.9	662	US-10-775-180-611	Sequence 611, App
22	3422	95.9	662	US-10-775-204-1623	Sequence 1623, App
23	3421	95.9	668	US-10-775-180-613	Sequence 613, App
24	3421	95.9	668	US-10-775-204-1625	Sequence 1625, App
25	3420.5	95.9	664	US-10-775-180-598	Sequence 598, App
26	3420.5	95.9	664	US-10-775-204-1607	Sequence 1607, App
27	3418.5	95.8	663	US-10-775-180-600	Sequence 600, App

ALIGNMENTS

Query	Score	DB ID	Description
28	3418.5	US-10-775-204-1609	Sequence 1609, App
29	3416	US-10-775-180-614	Sequence 614, App
30	3416	US-10-775-204-1626	Sequence 1626, App
31	3414.5	US-10-775-180-599	Sequence 599, App
32	3414.5	US-10-775-204-1608	Sequence 1608, App
33	3413.5	US-10-775-180-422	Sequence 422, App
34	3413.5	US-10-775-204-1234	Sequence 1234, App
35	3412.5	US-10-775-180-601	Sequence 601, App
36	3412.5	US-10-775-204-1610	Sequence 1610, App
37	3412.5	US-10-775-180-574	Sequence 574, App
38	3278	US-10-775-204-1559	Sequence 1559, App
39	3275.5	US-10-775-180-623	Sequence 623, App
40	3275.5	US-10-775-204-1640	Sequence 1640, App
41	3267	US-10-775-204-1655	Sequence 1655, App
42	3265	US-10-775-180-131	Sequence 131, App
43	3265	US-10-775-204-417	Sequence 417, App
44	3261.5	US-10-775-204-1620	Sequence 1620, App
45	3259	US-10-775-180-129	Sequence 129, App

RESULT 1
US-10-775-180-447
Sequence 447, Application US/10775180
Publication No. US20050054570A1
GENERAL INFORMATION:
APPLICANT: Rosen, Craig A.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF574
CURRENT APPLICATION NUMBER: US/10/775,180
PRIOR FILING DATE: 2004-02-11
PRIOR APPLICATION NUMBER: 2002-12-23
PRIOR FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR FILING DATE: 2002-02-28
PRIOR APPLICATION NUMBER: 60/378,950
PRIOR FILING DATE: 2002-05-10
PRIOR APPLICATION NUMBER: 60/398,008
PRIOR FILING DATE: 2002-07-24
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR FILING DATE: 2002-09-18
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR FILING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: 60/417,611
PRIOR FILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/420,246
PRIOR FILING DATE: 2002-10-23
PRIOR APPLICATION NUMBER: 60/423,623
PRIOR FILING DATE: 2002-11-05
Remaining Prior Application data removed - See file wrapper or PALM.
NUMBER OF SEQ ID NOS: 858
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 447
LENGTH: 674
TYPE: PRT
ORGANISM: Homo sapiens
US-10-775-180-447

Query Match 100.0%; Score 3568; DB 5; Length 674;
Best Local Similarity 100.0%; Pred. No. 1.4e-270; Indels 0; Gaps 0;
Matches 674; Conservative 0; Mismatches 0;

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Db      121 QCCPEPDHVKLVNERTVTEPAKTCVADBSANCDKSLHTLFGDKLCTVAATLRETYGEMADCC 180
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Db      241 PELLFPAKRYKAAFTCCQAAADKAAQLPKLDELREBGRASAKORLKCASIQKGERBAF 300
Oy      301 KAMAVARLSQRPKAFPAVSKLVTDLTKVHTCCGDLLECGADRDADLAKTICENQDSI 360
Db      301 KAMAVARLSQRPKAFPAVSKLVTDLTKVHTCCGDLLECGADRDADLAKTICENQDSI 360
Oy      361 SSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADPVESKQVCKNYAEAKDVLGMFL 420
Db      361 SSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADPVESKQVCKNYAEAKDVLGMFL 420
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Db      421 YEYARRHPDYSVLLLRLLAKTYETTLKCCAAADPHECYAKVDFEKPVLVEBPQMLIKQN 480
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Oy      541 YLSVNLQLCVLEHKTVPVSDRVTCKCTESLVNRRPCFSALVDEYVYVPEFNAETFTFHA 600
Db      541 YLSVNLQLCVLEHKTVPVSDRVTCKCTESLVNRRPCFSALVDEYVYVPEFNAETFTFHA 600
Oy      601 DICTLSEKERQIKKQTAVALVYKHKPKATKEQLKAVMDPFAAVFVCKCQADDKETCFABE 660
Db      601 DICTLSEKERQIKKQTAVALVYKHKPKATKEQLKAVMDPFAAVFVCKCQADDKETCFABE 660
Oy      661 GKGLVAASQALGL 674
Db      661 GKGLVAASQALGL 674

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; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO: 1280
; LENGTH: 674
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-775-204-1280

Query Match      100.0%; Score 3568; DB 5; Length 674;
Best Local Similarity 100.0%; Pred. No. 1,4e-270;
Matches 674; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy      1 MNIFYIFLILSPVOGELHTRRGSIDRKHGEGFTSDVSSYLEGQAQKEFLAWLVKGRH 60
Db      1 MNIFYIFLILSPVOGELHTRRGSIDRKHGEGFTSDVSSYLEGQAQKEFLAWLVKGRH 60
Oy      61 GEGTFTSDVSSYLEGQAQKEFLAWLVKGRDAHKSEVAHRFKDLSGENFKALVLIAPAOYL 120
Db      61 GEGTFTSDVSSYLEGQAQKEFLAWLVKGRDAHKSEVAHRFKDLSGENFKALVLIAPAOYL 120
Oy      121 QCCPEPDHVKLVNERTVTEPAKTCVADBSANCDKSLHTLFGDKLCTVAATLRETYGEMADCC 180
Db      121 QCCPEPDHVKLVNERTVTEPAKTCVADBSANCDKSLHTLFGDKLCTVAATLRETYGEMADCC 180
Oy      181 AKQEBRNRCFLQHKDDNPNLPRLVREVDVWCTAFHNDNEFTLKKYLYEIRARHPYFA 240
Db      181 AKQEBRNRCFLQHKDDNPNLPRLVREVDVWCTAFHNDNEFTLKKYLYEIRARHPYFA 240
Oy      241 PELLFPAKRYKAAFTCCQAAADKAAQLPKLDELREBGRASAKORLKCASIQKGERBAF 300
Db      241 PELLFPAKRYKAAFTCCQAAADKAAQLPKLDELREBGRASAKORLKCASIQKGERBAF 300
Oy      301 KAMAVARLSQRPKAFPAVSKLVTDLTKVHTCCGDLLECGADRDADLAKTICENQDSI 360
Db      301 KAMAVARLSQRPKAFPAVSKLVTDLTKVHTCCGDLLECGADRDADLAKTICENQDSI 360
Oy      361 SSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADPVESKQVCKNYAEAKDVLGMFL 420
Db      361 SSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADPVESKQVCKNYAEAKDVLGMFL 420
Oy      421 YEYARRHPDYSVLLLRLLAKTYETTLKCCAAADPHECYAKVDFEKPVLVEBPQMLIKQN 480
Db      421 YEYARRHPDYSVLLLRLLAKTYETTLKCCAAADPHECYAKVDFEKPVLVEBPQMLIKQN 480
Oy      481 CELFEOLGKYPONALLVRYTKKVPQVSTPLVYVSRNLGKVGSKCCCKHPEAKRMPCAED 540
Db      481 CELFEOLGKYPONALLVRYTKKVPQVSTPLVYVSRNLGKVGSKCCCKHPEAKRMPCAED 540
Oy      541 YLSVNLQLCVLEHKTVPVSDRVTCKCTESLVNRRPCFSALVDEYVYVPEFNAETFTFHA 600
Db      541 YLSVNLQLCVLEHKTVPVSDRVTCKCTESLVNRRPCFSALVDEYVYVPEFNAETFTFHA 600
Oy      601 DICTLSEKERQIKKQTAVALVYKHKPKATKEQLKAVMDPFAAVFVCKCQADDKETCFABE 660
Db      601 DICTLSEKERQIKKQTAVALVYKHKPKATKEQLKAVMDPFAAVFVCKCQADDKETCFABE 660
Oy      661 GKGLVAASQALGL 674
Db      661 GKGLVAASQALGL 674

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RESULT 3
US-10-775-180-419
; Sequence 419, Application US/10775180
; Publication No. US20050054570A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; TITLE OF INVENTION: Albumin Fusion Proteins

```



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FILE REFERENCE: PF574
CURRENT APPLICATION NUMBER: US/10/775,180
CURRENT FILING DATE: 2004-02-11
PRIOR APPLICATION NUMBER: 2004-02-11
PRIOR FILING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR FILING DATE: 2002-02-28
PRIOR APPLICATION NUMBER: 60/378,950
PRIOR FILING DATE: 2002-05-10
PRIOR APPLICATION NUMBER: 60/398,008
PRIOR FILING DATE: 2002-07-24
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR FILING DATE: 2002-09-18
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR FILING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: 60/417,611
PRIOR FILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/420,246
PRIOR FILING DATE: 2002-10-23
PRIOR APPLICATION NUMBER: 60/423,623
PRIOR FILING DATE: 2002-11-05
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 858
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 419
LENGTH: 669
TYPE: PRT
ORGANISM: Homo sapiens
US-10-775-180-419

Query Match          96.5%; Score 3444.5; DB 5; Length 669;
Best Local Similarity 97.3%; Pred. No. 6,8e-261;
Matches 654; Conservative 4; Mismatches 5; Indels 9; Gaps 1;

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DB 538 SVTLNQLCVLHEKTPVSDVTKCTESLTVNRBPCTSALEVDITVYKCFNAETTFPHADI 597
QY 603 CTLSEKREIQIKQTLVVELVHKHPRKATKPOLKANWDDFAAFYKCCKADDKETCFABEGK 662
DB 598 CTLSEKREIQIKQTLVVELVHKHPRKATKPOLKANWDDFAAFYKCCKADDKETCFABEGK 657
QY 663 KLVAASQAALGL 674
DB 658 KLVAASQAALGL 669

RESULT 4
US-10-775-204-1231
Sequence 1231, Application US/10775204
Publication No. US20050186664A1
GENERAL INFORMATION:
APPLICANT: Rosen, Craig A.
APPLICANT: Haseltine, William A.
APPLICANT: Balance, David J.
APPLICANT: Turner, Andrew J.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564
CURRENT APPLICATION NUMBER: US/10/775,204
CURRENT FILING DATE: 2004-02-11
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR FILING DATE: 2002-02-28
PRIOR APPLICATION NUMBER: 60/378,950
PRIOR FILING DATE: 2002-05-10
PRIOR APPLICATION NUMBER: 60/398,008
PRIOR FILING DATE: 2002-07-24
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR FILING DATE: 2002-09-18
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR FILING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: 60/417,611
PRIOR FILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/420,246
PRIOR FILING DATE: 2002-10-23
PRIOR APPLICATION NUMBER: 60/423,623
PRIOR FILING DATE: 2002-11-05
PRIOR APPLICATION NUMBER: 60/351,360
PRIOR FILING DATE: 2002-01-28
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 2222
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 1231
LENGTH: 669
TYPE: PRT
ORGANISM: Homo sapiens
US-10-775-204-1231

Query Match          96.5%; Score 3444.5; DB 5; Length 669;
Best Local Similarity 97.3%; Pred. No. 6,8e-261;
Matches 654; Conservative 4; Mismatches 5; Indels 9; Gaps 1;

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QY 243 LIFPAKRYKAATFECCOAAADKAACLLPKDLBDRDEBKASSAKQRLKCASTLQKGERAFKA 302
 DB 238 LIFPAKRYKAATFECCOAAADKAACLLPKDLBDRDEBKASSAKQRLKCASTLQKGERAFKA 297
 QY 303 WAWARISQRPKAEFAVSKLVTDLTKVHTTECCHGDLLECADDRADLAKYICENODSIS 362
 DB 298 WAWARISQRPKAEFAVSKLVTDLTKVHTTECCHGDLLECADDRADLAKYICENODSIS 357
 QY 363 KJKECCERKLEKSHCTAIEVNDMPADLPSLAADPVESKDCVKNYAABKADYFAGMFLYE 422
 DB 358 KJKECCERKLEKSHCTAIEVNDMPADLPSLAADPVESKDCVKNYAABKADYFAGMFLYE 417
 QY 423 YARRHDDYVSVLLRLAKTYETTLLEKCAAADPHECYAKVDFEKPVLVEPQNLKONCE 482
 DB 418 YARRHDDYVSVLLRLAKTYETTLLEKCAAADPHECYAKVDFEKPVLVEPQNLKONCE 477
 QY 483 LEBOLGEYKFOVALLVRYTKKVPQVSTPTLVESRNLGKVGSKCCHPKAKMPCABDYI 542
 DB 478 LEBOLGEYKFOVALLVRYTKKVPQVSTPTLVESRNLGKVGSKCCHPKAKMPCABDYI 537
 QY 543 SVVNLQCVLHEKTPVSDRYTKCTESLVNRRPCFSALEVDFTYVPEKFAAETFTPHADI 602
 DB 538 SVVNLQCVLHEKTPVSDRYTKCTESLVNRRPCFSALEVDFTYVPEKFAAETFTPHADI 597
 QY 603 CTLSEKERQIKKQOTALVELVKHKPKATKEQLKAVMDPFAAFVEKCCAKDDKETCFABEKG 662
 DB 598 CTLSEKERQIKKQOTALVELVKHKPKATKEQLKAVMDPFAAFVEKCCAKDDKETCFABEKG 657
 QY 663 KLVAAASQAAALGL 674
 DB 658 KLVAAASQAAALGL 669

RESULT 5
 US-10-775-180-610
 ; Sequence 610, Application US/10775180
 ; Publication No. US20050054570A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Rosen, Craig A.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PF574
 ; CURRENT APPLICATION NUMBER: US/10/775,180
 ; PRIORITY FILING DATE: 2004-02-11
 ; PRIORITY FILING DATE: PCT/US02/40892
 ; PRIORITY FILING DATE: 2002-12-23
 ; PRIORITY FILING DATE: 2001-12-21
 ; PRIORITY FILING DATE: 2001-12-21
 ; PRIORITY FILING DATE: 2002-02-28
 ; PRIORITY FILING DATE: 2002-02-28
 ; PRIORITY FILING DATE: 2002-05-10
 ; PRIORITY FILING DATE: 2002-05-10
 ; PRIORITY FILING DATE: 2002-07-24
 ; PRIORITY FILING DATE: 2002-09-18
 ; PRIORITY FILING DATE: 2002-09-18
 ; PRIORITY FILING DATE: 2002-10-02
 ; PRIORITY FILING DATE: 2002-10-02
 ; PRIORITY FILING DATE: 2002-10-11
 ; PRIORITY FILING DATE: 2002-10-11
 ; PRIORITY FILING DATE: 2002-10-23
 ; PRIORITY FILING DATE: 2002-10-23
 ; PRIORITY FILING DATE: 2002-11-05
 ; Remaining prior Application data removed - See file Wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 858
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 610
 ; LENGTH: 730
 ; TYPR: PRT
 ; ORGANISM: Homo sapiens
 ; US-10-775-180-610

QY 8 LFLSFGGLRHTHRGSLDKRKGSTPDSVSSYLEGQAAAEFLAMLVKGGHGGTPTS 67
 DB 64 LFINNTTASIAKKEBGVSLDKKHGGTPTSDVSSYLEGQAAAEFLAMLVKGGHGGTPTS 123
 QY 68 DVSSYLEGQAAAEFLAMLVKGGDAHSEVAHSPKDLGSEENFVALVLIAPQYLQCCPFED 127
 DB 124 DVSSYLEGQAAAEFLAMLVKGGDAHSEVAHSPKDLGSEENFVALVLIAPQYLQCCPFED 183
 QY 128 HVKLVNEVTEPAKTCVADSEASBNCXSLHTLFGDKLCTVAVTLRETYGEMADCCAQOEPER 187
 DB 184 HVKLVNEVTEPAKTCVADSEASBNCXSLHTLFGDKLCTVAVTLRETYGEMADCCAQOEPER 243
 QY 188 NECPLQHDNDNENLRLVLRPPEVNNCTAFHNDSEFLKXLYLVEIARRHHPYAPABELLFFA 247
 DB 244 NECPLQHDNDNENLRLVLRPPEVNNCTAFHNDSEFLKXLYLVEIARRHHPYAPABELLFFA 303
 QY 248 KRYKKAATFECCOAAADKAACLLPKDLBDRDEBKASSAKQRLKCASTLQKGERAFKAAVAAR 307
 DB 304 KRYKKAATFECCOAAADKAACLLPKDLBDRDEBKASSAKQRLKCASTLQKGERAFKAAVAAR 363
 QY 308 LSQRPKAEFAVSKLVTDLTKVHTTECCHGDLLECADDRADLAKYICENODSISKLEK 367
 DB 364 LSQRPKAEFAVSKLVTDLTKVHTTECCHGDLLECADDRADLAKYICENODSISKLEK 423
 QY 368 CERKPLEKSHCTAIEVNDMPADLPSLAADPVESKDCVKNYAABKADYFAGMFLYVARRH 427
 DB 424 CERKPLEKSHCTAIEVNDMPADLPSLAADPVESKDCVKNYAABKADYFAGMFLYVARRH 483
 QY 428 PYSVVLILRLAKTYETTLLEKCAAADPHECYAKVDFEKPVLVEPQNLKONCELFEQL 487
 DB 484 PYSVVLILRLAKTYETTLLEKCAAADPHECYAKVDFEKPVLVEPQNLKONCELFEQL 543
 QY 488 GEYKFOVALLVRYTKKVPQVSTPTLVESRNLGKVGSKCCHPKAKMPCABDYISVVLN 547
 DB 544 GEYKFOVALLVRYTKKVPQVSTPTLVESRNLGKVGSKCCHPKAKMPCABDYISVVLN 603
 QY 548 QLCVHHEKTPVSDRYTKCTESLVNRRPCFSALEVDFTYVPEKFAAETFTPHADICTLSE 607
 DB 604 QLCVHHEKTPVSDRYTKCTESLVNRRPCFSALEVDFTYVPEKFAAETFTPHADICTLSE 663
 QY 608 KERQIKKQOTALVELVKHKPKATKEQLKAVMDPFAAFVEKCCAKDDKETCFABEKGKLVAA 667
 DB 664 KERQIKKQOTALVELVKHKPKATKEQLKAVMDPFAAFVEKCCAKDDKETCFABEKGKLVAA 723
 QY 668 SQAAALGL 674
 DB 724 SQAAALGL 730

Query Match 96.5%; Score 3444; DB 5; Length 730;
 Best Local Similarity 97.8%; Pred. No. 8.3e-261;
 Matches 652; Conservative 4; Mismatches 11; Indels 0; Gaps 0;

RESULT 6
 US-10-775-204-1622
 ; Sequence 1622, Application US/10775204
 ; Publication No. US20050186664A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Rosen, Craig A.
 ; APPLICANT: Haseltine, William A.
 ; APPLICANT: Balance, David J.
 ; APPLICANT: Turner, Andrew J.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PF564
 ; CURRENT APPLICATION NUMBER: US/10/775,204
 ; PRIORITY FILING DATE: 2004-02-11
 ; PRIORITY FILING DATE: 2001-12-21
 ; PRIORITY FILING DATE: 2001-12-21
 ; PRIORITY FILING DATE: 2002-02-28
 ; PRIORITY FILING DATE: 2002-02-28
 ; PRIORITY FILING DATE: 2002-05-10

? PRIOR APPLICATION NUMBER: 60/398,008
 ? PRIOR FILING DATE: 2002-07-24
 ? PRIOR APPLICATION NUMBER: 60/411,355
 ? PRIOR FILING DATE: 2002-09-18
 ? PRIOR APPLICATION NUMBER: 60/414,984
 ? PRIOR FILING DATE: 2002-10-02
 ? PRIOR APPLICATION NUMBER: 60/417,611
 ? PRIOR FILING DATE: 2002-10-11
 ? PRIOR APPLICATION NUMBER: 60/420,246
 ? PRIOR FILING DATE: 2002-10-23
 ? PRIOR APPLICATION NUMBER: 60/423,623
 ? PRIOR FILING DATE: 2002-11-05
 ? PRIOR APPLICATION NUMBER: 60/351,360
 ? PRIOR FILING DATE: 2002-01-28
 ? Remaining prior Application data removed - See File Wrapper or PALM.
 ? NUMBER OF SEQ ID NOS: 2222
 ? SOFTWARE: Patentln Ver. 2.0
 ? SEQ ID NO 1622
 ? LENGTH: 730
 ? TYPE: PRT
 ? ORGANISM: Homo sapiens
 ? US-10-775-204-1622

Query Match 96.5%; Score 3444; DB 5; Length 730;
 Best Local Similarity 97.8%; Pred. No. 8.3e-261; Indels 0; Gaps 0;
 Matches 652; Conservative 4; Mismatches 11;

8 LPLLSFVQGLEHTHRGSLDKRHHGEGFTSDVSSYLEGQAAKEFIAMLVKGRHGEFTS
 64 LFLNTTJASIAAEBEGSLDKRHHGEGFTSDVSSYLEGQAAKEFIAMLVKGRHGEFTS 123
 68 DVSSYLEGQAAKEFIAMLVKGRDHNKSEVARRFDLGEENFKALVLAFAQYLQCCPFED
 124 DVSSYLEGQAAKEFIAMLVKGRDHNKSEVARRFDLGEENFKALVLAFAQYLQCCPFED 183
 128 HVMLVNVEVTEPAKTCVADESAENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEPER 187
 184 HVMLVNVEVTEPAKTCVADESAENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEPER 243
 188 NEGFLQHKDNDPNLPRLVREVDVWCTAFHNDNETFLKKYLYEIAARRHPYFAPELLFPA 247
 244 NEGFLQHKDNDPNLPRLVREVDVWCTAFHNDNETFLKKYLYEIAARRHPYFAPELLFPA 303
 248 KRYKAFTTECCQAAADKAACTLPIKLDLIRDEGKASSAKORLKCASLQKFGERRAFQAVAR 307
 304 KRYKAFTTECCQAAADKAACTLPIKLDLIRDEGKASSAKORLKCASLQKFGERRAFQAVAR 363
 308 LSGRPPKARPAEAVSKVTDLTKVHTTECGHDLIECADDRADIAKYTCENODSISKKEC 367
 364 LSGRPPKARPAEAVSKVTDLTKVHTTECGHDLIECADDRADIAKYTCENODSISKKEC 423
 368 CEKPLLEKSHCIAEVENDEMPADLPSTLAADPVESKDVCKVYAEAKDVFLGMPFLVYARRH 427
 424 CEKPLLEKSHCIAEVENDEMPADLPSTLAADPVESKDVCKVYAEAKDVFLGMPFLVYARRH 483
 428 PDYSVVLILRLIAKTYETTLLEKCAADPHRECVAVYRPPRPLVYERPNLIKONCELEPOL 487
 484 PDYSVVLILRLIAKTYETTLLEKCAADPHRECVAVYRPPRPLVYERPNLIKONCELEPOL 543
 488 GEYKFEQALILVRYTKKYPQVSTPFLVVSRLVGVSKCCGHPKAKMPKADYDLVSVLVN 547
 544 GEYKFEQALILVRYTKKYPQVSTPFLVVSRLVGVSKCCGHPKAKMPKADYDLVSVLVN 603
 548 QLCYLAHEKTPVSDRVTYKCTESTLVNRRPCEFSALREVDITVYKPEFNAETFTFHADICTLSE 607
 604 QLCYLAHEKTPVSDRVTYKCTESTLVNRRPCEFSALREVDITVYKPEFNAETFTFHADICTLSE 663
 608 KERQIKKQYALVLEVKEKPKATKEQLKAVMDDFAAFYEEKCKADDKETCPAEEKQKVVAA 667
 664 KERQIKKQYALVLEVKEKPKATKEQLKAVMDDFAAFYEEKCKADDKETCPAEEKQKVVAA 723
 668 SOAALGL 674

Db 724 SOAALGL 730

RESULT 7

US-10-775-180-425
 ? Sequence 425, Application US/10775180
 ? Publication No. US20050054570A1
 ? GENERAL INFORMATION:
 ? APPLICANT: Rosen, Craig A.
 ? APPLICANT: Haseltine, William A.
 ? TITLE OF INVENTION: Albumin Fusion Proteins
 ? FILE REFERENCE: PFS74
 ? CURRENT APPLICATION NUMBER: US/10/775.180
 ? PCT/US02/40892
 ? PRIOR FILING DATE: 2004-02-11
 ? PRIOR APPLICATION NUMBER: 60/341,811
 ? PRIOR FILING DATE: 2002-12-23
 ? PRIOR APPLICATION NUMBER: 60/360,000
 ? PRIOR FILING DATE: 2001-12-21
 ? PRIOR APPLICATION NUMBER: 60/378,950
 ? PRIOR FILING DATE: 2002-02-28
 ? PRIOR APPLICATION NUMBER: 60/398,008
 ? PRIOR FILING DATE: 2002-05-10
 ? PRIOR APPLICATION NUMBER: 60/414,984
 ? PRIOR FILING DATE: 2002-07-24
 ? PRIOR APPLICATION NUMBER: 60/411,355
 ? PRIOR FILING DATE: 2002-09-18
 ? PRIOR APPLICATION NUMBER: 60/420,246
 ? PRIOR FILING DATE: 2002-10-11
 ? PRIOR APPLICATION NUMBER: 60/423,623
 ? Remaining prior Application data removed - See File Wrapper or PALM.
 ? NUMBER OF SEQ ID NOS: 858
 ? SOFTWARE: Patentln Ver. 2.0
 ? SEQ ID NO 425
 ? LENGTH: 669
 ? TYPE: PRT
 ? ORGANISM: Homo sapiens
 ? US-10-775-180-425

Query Match 96.4%; Score 3438.5; DB 5; Length 669;
 Best Local Similarity 97.2%; Pred. No. 2e-260; Indels 9; Gaps 1;
 Matches 653; Conservative 4; Mismatches 6;

3 IFYIFPLLSFVQGLEHTHRGSLDKRHHGEGFTSDVSSYLEGQAAKEFIAMLVKGRHGE 62
 7 ISLFLPSSKAYSR-----SLDKRHHGEGFTSDVSSYLEGQAAKEFIAMLVKGRHAE 57
 63 GFTSDVSSYLEGQAAKEFIAMLVKGRDHNKSEVARRFDLGEENFKALVLAFAQYLQ 122
 58 GFTSDVSSYLEGQAAKEFIAMLVKGRDHNKSEVARRFDLGEENFKALVLAFAQYLQ 117
 123 CPREDHVKLVNRETEREPAKTCVADESAENCDKSLHTLFGDKLCTVATLRETYGEMADCCAK 182
 118 CPREDHVKLVNRETEREPAKTCVADESAENCDKSLHTLFGDKLCTVATLRETYGEMADCCAK 177
 183 QEBERNBCFLQHKDNDPNLPRLVREVDVWCTAFHNDNETFLKKYLYEIAARRHPYFAPE 242
 178 QEBERNBCFLQHKDNDPNLPRLVREVDVWCTAFHNDNETFLKKYLYEIAARRHPYFAPE 237
 243 LFPFAKRYKAAFTTECCQAAADKAACTLPIKLDLIRDEGKASSAKORLKCASLQKFGERRAFKA 302
 238 LFPFAKRYKAAFTTECCQAAADKAACTLPIKLDLIRDEGKASSAKORLKCASLQKFGERRAFKA 297
 303 WAVARLSORPPKARPAEAVSKVTDLTKVHTTECGHDLIECADDRADIAKYTCENODSIS 362
 298 WAVARLSORPPKARPAEAVSKVTDLTKVHTTECGHDLIECADDRADIAKYTCENODSIS 357
 363 KLKCCCKPLLEKSHCIAEVENDEMPADLPSTLAADPVESKDVCKVYAEAKDVFLGMPFLYE 422

Db 358 KLKCCCEKRLKESHCIAEVENDEMPADLPSIAADPVESKDYCKNVAEAKDVFLLGMPLYE 417
 QY 423 YARRHPDYSVLLMLRLAKTYETTLERKCCAAADPHCEYAKVDFEFKPLVEBPONLIKONCE 482
 Db 418 YARRHPDYSVLLMLRLAKTYETTLERKCCAAADPHCEYAKVDFEFKPLVEBPONLIKONCE 477
 QY 483 LPEQLGEYKFNALLVRYTKKVPQVSTPPLVEYSRNLGKVGSKCCGHPAKMPCAEVDYL 542
 Db 478 LPEQLGEYKFNALLVRYTKKVPQVSTPPLVEYSRNLGKVGSKCCGHPAKMPCAEVDYL 537
 QY 543 SVVNLQCVLHEKTPVSDRVTKCTESLIVNRRPFCFSALAEVDETVYKPEFNAETFFPHADI 602
 Db 538 SVVNLQCVLHEKTPVSDRVTKCTESLIVNRRPFCFSALAEVDETVYKPEFNAETFFPHADI 597
 QY 603 CTLSEKERQIKKQTLAVELVYKHKPKATKQOLKAVMDPAAFVCECKKADDKETCFABEGK 662
 Db 598 CTLSEKERQIKKQTLAVELVYKHKPKATKQOLKAVMDPAAFVCECKKADDKETCFABEGK 657
 QY 663 KLVAAASQAALGL 674
 Db 658 KLVAAASQAALGL 669

RESULT 8
 US-10-775-204-1237
 ; Sequence 1237, Application US/10775204
 ; Publication No. US20050186664A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Rosen, Craig A.
 ; APPLICANT: Haseltine, William A.
 ; APPLICANT: Turner, Andrew J.
 ; APPLICANT: Turner, Andrew J.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PF564
 ; CURRENT APPLICATION NUMBER: US/10/775,204
 ; PRIORITY FILING DATE: 2004-02-11
 ; PRIOR APPLICATION NUMBER: 60/341,811
 ; PRIORITY FILING DATE: 2001-12-21
 ; PRIOR APPLICATION NUMBER: 60/360,000
 ; PRIORITY FILING DATE: 2002-02-28
 ; PRIOR APPLICATION NUMBER: 60/378,950
 ; PRIORITY FILING DATE: 2002-05-10
 ; PRIOR APPLICATION NUMBER: 60/398,008
 ; PRIORITY FILING DATE: 2002-07-24
 ; PRIOR APPLICATION NUMBER: 60/411,355
 ; PRIORITY FILING DATE: 2002-09-18
 ; PRIOR APPLICATION NUMBER: 60/414,984
 ; PRIORITY FILING DATE: 2002-10-02
 ; PRIOR APPLICATION NUMBER: 60/417,611
 ; PRIORITY FILING DATE: 2002-10-11
 ; PRIOR APPLICATION NUMBER: 60/420,246
 ; PRIORITY FILING DATE: 2002-10-23
 ; PRIOR APPLICATION NUMBER: 60/423,623
 ; PRIORITY FILING DATE: 2002-11-05
 ; PRIOR APPLICATION NUMBER: 60/351,360
 ; PRIORITY FILING DATE: 2002-01-28
 ; Remaining prior application data removed - See file wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 2222
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 1237
 ; LENGTH: 669
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-775-204-1237

Query Match 96.4%; Score 3438.5; DB 5; Length 669;
 Best Local Similarity 97.2%; Pred. No. 2e-260; Indels 9; Gaps 1;
 Matches 653; Conservative 4; Mismatches 6;

QY 63 GTFPDSVSSYLEGQAAKEFIAMLVKGRDAHSEVAHRRKDLGSEMPKALVLAFAQYIQO 122
 Db 58 GTFPDSVSSYLEGQAAKEFIAMLVKGRDAHSEVAHRRKDLGSEMPKALVLAFAQYIQO 117
 QY 123 CPEFDHVKLVNEVTEPFAKTCVADSEANCDKSLHTLFGPKLCTVATLRETTYGEMADCCAK 182
 Db 118 CPEFDHVKLVNEVTEPFAKTCVADSEANCDKSLHTLFGPKLCTVATLRETTYGEMADCCAK 177
 QY 183 QPBRNECFLOHKDNDNPLPRLVREVDVMTAFHNDNEETLKKYLYEYIARRHPYFYAE 242
 Db 178 QPBRNECFLOHKDNDNPLPRLVREVDVMTAFHNDNEETLKKYLYEYIARRHPYFYAE 237
 QY 243 LIPFAKRYKAATTECCQAAADKACILPKLDELRLDSEKASNAQORLKCASLQKFGRRARFA 302
 Db 238 LIPFAKRYKAATTECCQAAADKACILPKLDELRLDSEKASNAQORLKCASLQKFGRRARFA 297
 QY 303 WAAVRLSQRFPKAEPAEYSKLVTDLITKVTTECCGDDLECADDRADLAKYICENODSIS 362
 Db 298 WAAVRLSQRFPKAEPAEYSKLVTDLITKVTTECCGDDLECADDRADLAKYICENODSIS 357
 QY 363 KLKCCCEKRLKESHCIAEVENDEMPADLPSIAADPVESKDYCKNVAEAKDVFLLGMPLYE 422
 Db 358 KLKCCCEKRLKESHCIAEVENDEMPADLPSIAADPVESKDYCKNVAEAKDVFLLGMPLYE 417
 QY 423 YARRHPDYSVLLMLRLAKTYETTLERKCCAAADPHCEYAKVDFEFKPLVEBPONLIKONCE 482
 Db 418 YARRHPDYSVLLMLRLAKTYETTLERKCCAAADPHCEYAKVDFEFKPLVEBPONLIKONCE 477
 QY 483 LPEQLGEYKFNALLVRYTKKVPQVSTPPLVEYSRNLGKVGSKCCGHPAKMPCAEVDYL 542
 Db 478 LPEQLGEYKFNALLVRYTKKVPQVSTPPLVEYSRNLGKVGSKCCGHPAKMPCAEVDYL 537
 QY 543 SVVNLQCVLHEKTPVSDRVTKCTESLIVNRRPFCFSALAEVDETVYKPEFNAETFFPHADI 602
 Db 538 SVVNLQCVLHEKTPVSDRVTKCTESLIVNRRPFCFSALAEVDETVYKPEFNAETFFPHADI 597
 QY 603 CTLSEKERQIKKQTLAVELVYKHKPKATKQOLKAVMDPAAFVCECKKADDKETCFABEGK 662
 Db 598 CTLSEKERQIKKQTLAVELVYKHKPKATKQOLKAVMDPAAFVCECKKADDKETCFABEGK 657
 QY 663 KLVAAASQAALGL 674
 Db 658 KLVAAASQAALGL 669

RESULT 9
 US-10-775-180-612
 ; Sequence 612, Application US/10775180
 ; Publication No. US20050054570A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Rosen, Craig A.
 ; APPLICANT: Haseltine, William A.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PF574
 ; CURRENT APPLICATION NUMBER: US/10/775,180
 ; PRIORITY FILING DATE: 2004-02-11
 ; PRIOR APPLICATION NUMBER: PCT/US02/40892
 ; PRIORITY FILING DATE: 2002-12-23
 ; PRIOR APPLICATION NUMBER: 60/341,811
 ; PRIORITY FILING DATE: 2001-12-21
 ; PRIOR APPLICATION NUMBER: 60/360,000
 ; PRIORITY FILING DATE: 2002-02-28
 ; PRIOR APPLICATION NUMBER: 60/378,950
 ; PRIORITY FILING DATE: 2002-05-10
 ; PRIOR APPLICATION NUMBER: 60/398,008
 ; PRIORITY FILING DATE: 2002-07-24
 ; PRIOR APPLICATION NUMBER: 60/411,355
 ; PRIORITY FILING DATE: 2002-09-18
 ; PRIOR APPLICATION NUMBER: 60/414,984
 ; PRIORITY FILING DATE: 2002-10-02
 ; PRIOR APPLICATION NUMBER: 60/417,611
 ; PRIORITY FILING DATE: 2002-10-11
 ; PRIOR APPLICATION NUMBER: 60/420,246

Query Match 96.4%; Score 3438.5; DB 5; Length 669;
 Best Local Similarity 97.2%; Pred. No. 2e-260; Indels 9; Gaps 1;
 Matches 653; Conservative 4; Mismatches 6;

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PRIOR FILING DATE: 2002-10-23
PRIOR APPLICATION NUMBER: 60/423,623
PRIOR FILING DATE: 2002-11-05
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 858
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 612
LENGTH: 730
TYPE: PRT
ORGANISM: Homo sapiens
US-10-775-180-612

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Query Match      96.4%; Score 3438; DB 5; Length 730;
Best Local Similarity 97.6%; Pred. No. 2,5e-260;
Matches 651; Conservative 4; Mismatches 12; Indels 0; Gaps 0;

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ID	Sequence	Score	DB	Length
QY	8 LPLLSFVQGLHHTHRKRSGLDKRRGGEGFTSDVSSYLEGGAAKFFIAMLVYKGRHGGEGFTS	67		
DB	64 LPLNTTITASIAAKEBEGVSLDKRRGGEGFTSDVSSYLEGGAAKFFIAMLVYKGRHGGEGFTS	123		
QY	68 DVSSYLEGQAAKFFIAMLVYKGRDAHKSEVAHRRFKDAGEENFKALVLIAPAOYLQCCPFED	127		
DB	124 DVSSYLEGQAAKFFIAMLVYKGRDAHKSEVAHRRFKDAGEENFKALVLIAPAOYLQCCPFED	183		
QY	128 HVKLVNVEVEFAKTCVADSSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPER	187		
DB	184 HVKLVNVEVEFAKTCVADSSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPER	243		
QY	188 NEGFLOHKDNDPNLPRLVREVDVMCTAFHNDNETFLKRYLYEARRHPYFAPELLFFA	247		
DB	244 NEGFLOHKDNDPNLPRLVREVDVMCTAFHNDNETFLKRYLYEARRHPYFAPELLFFA	303		
QY	248 KRYKAAFTTECCQAADRAACILPKLDELDEGKASSAKORLKASLQKFGERRAFKAWAVAR	307		
DB	304 KRYKAAFTTECCQAADRAACILPKLDELDEGKASSAKORLKASLQKFGERRAFKAWAVAR	363		
QY	308 LSGRPPKAPFAEAVSKLVTDLTKVHTCCGHDLLFCADDPADLAKYICENODSISSKLKEC	367		
DB	364 LSGRPPKAPFAEAVSKLVTDLTKVHTCCGHDLLFCADDPADLAKYICENODSISSKLKEC	423		
QY	368 CERKPLLEKSHCIAEVENDEMPADLPSTLAADPVESSKVCNKYAAEKADVFLGMPLYEYARRH	427		
DB	424 CERKPLLEKSHCIAEVENDEMPADLPSTLAADPVESSKVCNKYAAEKADVFLGMPLYEYARRH	483		
QY	428 PDYSVVLILAKTYETLLEKCCAAADPHECYAKVDFEFLVEBPQNLIKONCELFEOL	487		
DB	484 PDYSVVLILAKTYETLLEKCCAAADPHECYAKVDFEFLVEBPQNLIKONCELFEOL	543		
QY	488 GEYKFOALLVRYTKKVPQVSTPVLVESRNILGKVGSKCKKHPRAKMPCAEDYLSVVLN	547		
DB	544 GEYKFOALLVRYTKKVPQVSTPVLVESRNILGKVGSKCKKHPRAKMPCAEDYLSVVLN	603		
QY	548 QLCVLAHKTVPDSRVTCCSTESLVNRRPCPSALIEVDETVYVPEKNAEFTTFHADICTLSE	607		
DB	604 QLCVLAHKTVPDSRVTCCSTESLVNRRPCPSALIEVDETVYVPEKNAEFTTFHADICTLSE	663		
QY	608 KERQIKKQTAALVELVHKPKPKATKEQLKAVMDPFAAFYEKCCCKADKSTCEPAEBSKULVAA	667		
DB	664 KERQIKKQTAALVELVHKPKPKATKEQLKAVMDPFAAFYEKCCCKADKSTCEPAEBSKULVAA	723		
QY	668 SQAAALGL 674			
DB	724 SQAAALGL 730			

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APPLICANT: Turner, Andrew J.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: P6564
CURRENT APPLICATION NUMBER: US/10/775,204
CURRENT FILING DATE: 2004-02-11
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR FILING DATE: 2002-02-28
PRIOR APPLICATION NUMBER: 60/378,950
PRIOR FILING DATE: 2002-05-10
PRIOR APPLICATION NUMBER: 60/398,008
PRIOR FILING DATE: 2002-07-24
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR FILING DATE: 2002-09-18
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR FILING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: 60/417,611
PRIOR FILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/420,246
PRIOR FILING DATE: 2002-10-23
PRIOR APPLICATION NUMBER: 60/423,623
PRIOR FILING DATE: 2002-11-05
PRIOR APPLICATION NUMBER: 60/351,360
PRIOR FILING DATE: 2002-01-28
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 2222
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 1624
LENGTH: 730
TYPE: PRT
ORGANISM: Homo sapiens
US-10-775-204-1624

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ID	Sequence	Score	DB	Length
QY	8 LPLLSFVQGLHHTHRKRSGLDKRRGGEGFTSDVSSYLEGGAAKFFIAMLVYKGRHGGEGFTS	67		
DB	64 LPLNTTITASIAAKEBEGVSLDKRRGGEGFTSDVSSYLEGGAAKFFIAMLVYKGRHGGEGFTS	123		
QY	68 DVSSYLEGQAAKFFIAMLVYKGRDAHKSEVAHRRFKDAGEENFKALVLIAPAOYLQCCPFED	127		
DB	124 DVSSYLEGQAAKFFIAMLVYKGRDAHKSEVAHRRFKDAGEENFKALVLIAPAOYLQCCPFED	183		
QY	128 HVKLVNVEVEFAKTCVADSSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPER	187		
DB	184 HVKLVNVEVEFAKTCVADSSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPER	243		
QY	188 NEGFLOHKDNDPNLPRLVREVDVMCTAFHNDNETFLKRYLYEARRHPYFAPELLFFA	247		
DB	244 NEGFLOHKDNDPNLPRLVREVDVMCTAFHNDNETFLKRYLYEARRHPYFAPELLFFA	303		
QY	248 KRYKAAFTTECCQAADRAACILPKLDELDEGKASSAKORLKASLQKFGERRAFKAWAVAR	307		
DB	304 KRYKAAFTTECCQAADRAACILPKLDELDEGKASSAKORLKASLQKFGERRAFKAWAVAR	363		
QY	308 LSGRPPKAPFAEAVSKLVTDLTKVHTCCGHDLLFCADDPADLAKYICENODSISSKLKEC	367		
DB	364 LSGRPPKAPFAEAVSKLVTDLTKVHTCCGHDLLFCADDPADLAKYICENODSISSKLKEC	423		
QY	368 CERKPLLEKSHCIAEVENDEMPADLPSTLAADPVESSKVCNKYAAEKADVFLGMPLYEYARRH	427		
DB	424 CERKPLLEKSHCIAEVENDEMPADLPSTLAADPVESSKVCNKYAAEKADVFLGMPLYEYARRH	483		
QY	308 LSGRPPKAPFAEAVSKLVTDLTKVHTCCGHDLLFCADDPADLAKYICENODSISSKLKEC	367		
DB	364 LSGRPPKAPFAEAVSKLVTDLTKVHTCCGHDLLFCADDPADLAKYICENODSISSKLKEC	423		
QY	428 CERKPLLEKSHCIAEVENDEMPADLPSTLAADPVESSKVCNKYAAEKADVFLGMPLYEYARRH	427		
DB	424 CERKPLLEKSHCIAEVENDEMPADLPSTLAADPVESSKVCNKYAAEKADVFLGMPLYEYARRH	483		
QY	488 GEYKFOALLVRYTKKVPQVSTPVLVESRNILGKVGSKCKKHPRAKMPCAEDYLSVVLN	547		
DB	544 GEYKFOALLVRYTKKVPQVSTPVLVESRNILGKVGSKCKKHPRAKMPCAEDYLSVVLN	603		

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RESULT 10
US-10-775-204-1624
Sequence 1624, Application US/10775204
Publication No. US20050186664N1
GENERAL INFORMATION:
APPLICANT: Rosen, Craig A.
APPLICANT: Haseletine, William A.
APPLICANT: Balance, David J.

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QY 548 QLCVLIHEKTPVSDRVTKCTTESLIVNRRPCFSALAEVDETVVYVPEFNAETFTFHADICTTISE 607
 DB 604 QLCVLIHEKTPVSDRVTKCTTESLIVNRRPCFSALAEVDETVVYVPEFNAETFTFHADICTTISE 663
 QY 608 KRRQIKKQJALVYLVYKHKRKAATKBEQIKAVMDPDAAPVVEKCCQADDKETCTCPAEBGKQLVAA 667
 DB 664 KRRQIKKQJALVYLVYKHKRKAATKBEQIKAVMDPDAAPVVEKCCQADDKETCTCPAEBGKQLVAA 723
 QY 668 SQAAALGL 674
 DB 724 SQAAALGL 730

RESULT 11
 US-10-775-180-420
 ; Sequence 420, Application US/10775180
 ; Publication No. US20050054570A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Rosen, Craig A.
 ; APPLICANT: Haseltine, William A.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PF574
 ; CURRENT APPLICATION NUMBER: US/10/775,180
 ; CURRENT FILING DATE: 2004-02-11
 ; PRIOR APPLICATION NUMBER: PCT/US02/40892
 ; PRIOR FILING DATE: 2002-12-23
 ; PRIOR APPLICATION NUMBER: 60/341,811
 ; PRIOR FILING DATE: 2001-12-21
 ; PRIOR APPLICATION NUMBER: 60/360,000
 ; PRIOR FILING DATE: 2002-02-28
 ; PRIOR APPLICATION NUMBER: 60/378,950
 ; PRIOR FILING DATE: 2002-05-10
 ; PRIOR APPLICATION NUMBER: 60/398,008
 ; PRIOR FILING DATE: 2002-07-24
 ; PRIOR APPLICATION NUMBER: 60/411,355
 ; PRIOR FILING DATE: 2002-09-18
 ; PRIOR APPLICATION NUMBER: 60/414,984
 ; PRIOR FILING DATE: 2002-10-02
 ; PRIOR APPLICATION NUMBER: 60/417,611
 ; PRIOR FILING DATE: 2002-10-11
 ; PRIOR APPLICATION NUMBER: 60/420,246
 ; PRIOR FILING DATE: 2002-10-23
 ; PRIOR APPLICATION NUMBER: 60/423,623
 ; PRIOR FILING DATE: 2002-11-05
 ; Remaining Prior Application data removed - See file Wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 858
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 420
 ; LENGTH: 669
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-775-180-420

Query Match 96.2%; Score 3432.5; DB 5; Length 669;
 Best Local Similarity 97.0%; Pred. No. 5,9e-260;
 Matches 652; Conservative 4; Mismatches 7; Indels 9; Gaps 1;

QY 3 IYIYIFLISFVQGLHEHTHRGSLDRHGRGPTSPVSSYILBQAKKERIAMLVYGRHBB 62
 DB 7 ILSLFFSSAYSR-----SLDRRHABGTFPSSVSSYILBQAKKERIAMLVYGRHBB 57
 QY 63 GFTFSPVSSYILBQAKKERIAMLVYGRDAHKSEVVAHRFPDOLGENFKALVLAFAQYLYQQ 122
 DB 58 GFTFSPVSSYILBQAKKERIAMLVYGRDAHKSEVVAHRFPDOLGENFKALVLAFAQYLYQQ 117
 QY 123 CPEFDHVKLVNVEVTEFAKTCVADESANCDKSLHTLFGDKLCTVATLRRETYGEMADCCAK 182
 DB 118 CPEFDHVKLVNVEVTEFAKTCVADESANCDKSLHTLFGDKLCTVATLRRETYGEMADCCAK 177
 QY 183 QBERNECEFLQHKDDNDPNLPRLYRPRVDVWCTAFHNNEETPLKCYLYETARRRHPYVABE 242
 DB 178 QBERNECEFLQHKDDNDPNLPRLYRPRVDVWCTAFHNNEETPLKCYLYETARRRHPYVABE 237

QY 243 ILFFAKRYKAAPTECCQAAADKAACTLPLKLDLDRDEGKASAKORUKCASLQKFGERRARKA 302
 DB 238 ILFFAKRYKAAPTECCQAAADKAACTLPLKLDLDRDEGKASAKORUKCASLQKFGERRARKA 297
 QY 303 NAWARLSRPPKAEAEVSKLVTDLITKYHTSCCHGDLLECADDRADLAKYTCENODS1SS 362
 DB 298 NAWARLSRPPKAEAEVSKLVTDLITKYHTSCCHGDLLECADDRADLAKYTCENODS1SS 357
 QY 363 KLECCCEKPLLEKSHCIAEVENDEMPADLPSIAADFVESKDKVCKRYAARAKVFLGMFLYE 422
 DB 358 KLECCCEKPLLEKSHCIAEVENDEMPADLPSIAADFVESKDKVCKRYAARAKVFLGMFLYE 417
 QY 423 YARRHPDYSVVLILFLAKTYETLLEKCGAADDPHECNAKVPDEFKPLVEBPONLIKONCE 482
 DB 418 YARRHPDYSVVLILFLAKTYETLLEKCGAADDPHECNAKVPDEFKPLVEBPONLIKONCE 477
 QY 483 LPEOLGEYKFNALLVRYTKKVPQVSTPPLIVEVSRNLKQVSKCCGHPBAKMPCAEDYL 542
 DB 478 LPEOLGEYKFNALLVRYTKKVPQVSTPPLIVEVSRNLKQVSKCCGHPBAKMPCAEDYL 537
 QY 543 SVVLNQLCVLIHEKTPVSDRVTKCTTESLIVNRRPCFSALAEVDETVVYVPEFNAETFTFHADI 602
 DB 538 SVVLNQLCVLIHEKTPVSDRVTKCTTESLIVNRRPCFSALAEVDETVVYVPEFNAETFTFHADI 597
 QY 603 CTLSEKERQIKKQJALVYLVYKHKRKAATKBEQIKAVMDPDAAPVVEKCCQADDKETCPAEBGK 662
 DB 598 CTLSEKERQIKKQJALVYLVYKHKRKAATKBEQIKAVMDPDAAPVVEKCCQADDKETCPAEBGK 657
 QY 663 KVAASQAALGL 674
 DB 658 KVAASQAALGL 669

RESULT 12
 US-10-775-180-421
 ; Sequence 421, Application US/10775180
 ; Publication No. US20050054570A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Rosen, Craig A.
 ; APPLICANT: Haseltine, William A.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PF574
 ; CURRENT APPLICATION NUMBER: US/10/775,180
 ; CURRENT FILING DATE: 2004-02-11
 ; PRIOR APPLICATION NUMBER: PCT/US02/40892
 ; PRIOR FILING DATE: 2002-12-23
 ; PRIOR APPLICATION NUMBER: 60/341,811
 ; PRIOR FILING DATE: 2001-12-21
 ; PRIOR APPLICATION NUMBER: 60/360,000
 ; PRIOR FILING DATE: 2002-02-28
 ; PRIOR APPLICATION NUMBER: 60/378,950
 ; PRIOR FILING DATE: 2002-05-10
 ; PRIOR APPLICATION NUMBER: 60/398,008
 ; PRIOR FILING DATE: 2002-07-24
 ; PRIOR APPLICATION NUMBER: 60/411,355
 ; PRIOR FILING DATE: 2002-09-18
 ; PRIOR APPLICATION NUMBER: 60/414,984
 ; PRIOR FILING DATE: 2002-10-02
 ; PRIOR APPLICATION NUMBER: 60/417,611
 ; PRIOR FILING DATE: 2002-10-11
 ; PRIOR APPLICATION NUMBER: 60/420,246
 ; PRIOR FILING DATE: 2002-10-23
 ; PRIOR APPLICATION NUMBER: 60/423,623
 ; PRIOR FILING DATE: 2002-11-05
 ; Remaining Prior Application data removed - See file Wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 858
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 421
 ; LENGTH: 669
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-775-180-421

QY 243 ILFFAKRYKAAPTECCQAAADKAACTLPLKLDLDRDEGKASAKORUKCASLQKFGERRARKA 302
 DB 238 ILFFAKRYKAAPTECCQAAADKAACTLPLKLDLDRDEGKASAKORUKCASLQKFGERRARKA 297
 QY 303 NAWARLSRPPKAEAEVSKLVTDLITKYHTSCCHGDLLECADDRADLAKYTCENODS1SS 362
 DB 298 NAWARLSRPPKAEAEVSKLVTDLITKYHTSCCHGDLLECADDRADLAKYTCENODS1SS 357
 QY 363 KLECCCEKPLLEKSHCIAEVENDEMPADLPSIAADFVESKDKVCKRYAARAKVFLGMFLYE 422
 DB 358 KLECCCEKPLLEKSHCIAEVENDEMPADLPSIAADFVESKDKVCKRYAARAKVFLGMFLYE 417
 QY 423 YARRHPDYSVVLILFLAKTYETLLEKCGAADDPHECNAKVPDEFKPLVEBPONLIKONCE 482
 DB 418 YARRHPDYSVVLILFLAKTYETLLEKCGAADDPHECNAKVPDEFKPLVEBPONLIKONCE 477
 QY 483 LPEOLGEYKFNALLVRYTKKVPQVSTPPLIVEVSRNLKQVSKCCGHPBAKMPCAEDYL 542
 DB 478 LPEOLGEYKFNALLVRYTKKVPQVSTPPLIVEVSRNLKQVSKCCGHPBAKMPCAEDYL 537
 QY 543 SVVLNQLCVLIHEKTPVSDRVTKCTTESLIVNRRPCFSALAEVDETVVYVPEFNAETFTFHADI 602
 DB 538 SVVLNQLCVLIHEKTPVSDRVTKCTTESLIVNRRPCFSALAEVDETVVYVPEFNAETFTFHADI 597
 QY 603 CTLSEKERQIKKQJALVYLVYKHKRKAATKBEQIKAVMDPDAAPVVEKCCQADDKETCPAEBGK 662
 DB 598 CTLSEKERQIKKQJALVYLVYKHKRKAATKBEQIKAVMDPDAAPVVEKCCQADDKETCPAEBGK 657
 QY 663 KVAASQAALGL 674
 DB 658 KVAASQAALGL 669

Query Match 96.2%; Score 3432.5; DB 5; Length 669;
Best Local Similarity 97.0%; Pred. No. 5,9e-260;
Matches 652; Conservative 4; Mismatches 7; Indels 9; Gaps 1;

3 IFYIFPLLSFVQGLBHTHRGSLDKRGGFTSDVSSYILSGQAAKERFIAMLVKGRHGE 62
7 ISLFLPSSAYSR-----SLDKRHAEGFTSDVSSYILSGQAAKERFIAMLVKGRHAB 57
63 GFTSDVSSYILSGQAAKERFIAMLVKGRDAHKSEVAHRFKDLGSENFKALVLIAPAYLQO 122
58 GFTSDVSSYILSGQAAKERFIAMLVKGRDAHKSEVAHRFKDLGSENFKALVLIAPAYLQO 117
123 CPREDHVKLVNVEYTERFAKTCVADSEANCDKSLHTLFGDKLCTVATLRETYGEMADCCAK 182
118 CPREDHVKLVNVEYTERFAKTCVADSEANCDKSLHTLFGDKLCTVATLRETYGEMADCCAK 177
183 QEBERNCEFLQHKDDNPNLPRIVRPEVDVMTAFHNDNEBTFLLKCYLYEIRARRHPYFAPE 242
178 QEBERNCEFLQHKDDNPNLPRIVRPEVDVMTAFHNDNEBTFLLKCYLYEIRARRHPYFAPE 237
243 LFFPAKRYKAAFTFCCQAADKAACLLPKLDLDEBEGKASSAKORLKCASIQKRGGERAFKA 302
238 LFFPAKRYKAAFTFCCQAADKAACLLPKLDLDEBEGKASSAKORLKCASIQKRGGERAFKA 297
303 WAAVARLSORPPKAEFAVSKLVITDILTKVHTTECCGDLLECADRADIKAYICENODSIS 362
298 WAAVARLSORPPKAEFAVSKLVITDILTKVHTTECCGDLLECADRADIKAYICENODSIS 357
363 KLRKCECEKPLLEKSHCIARVENDEMPADLPSLAADPVESKDVCKNYABAKDVLGMFLYE 422
358 KLRKCECEKPLLEKSHCIARVENDEMPADLPSLAADPVESKDVCKNYABAKDVLGMFLYE 417
423 YARRHPDYVLLLRILAKTYETTLKCCAAADPHECYAVKVPDEFKPLVEBPQMLIKONCE 482
418 YARRHPDYVLLLRILAKTYETTLKCCAAADPHECYAVKVPDEFKPLVEBPQMLIKONCE 477
483 LPEQLGEBYKFNALLVRYTKKPVQVSTPPLVBSRNILGKVGSKCCGHPBAKRRPCABDYL 542
478 LPEQLGEBYKFNALLVRYTKKPVQVSTPPLVBSRNILGKVGSKCCGHPBAKRRPCABDYL 537
543 SVYLNQLCVLHEKTPVSDRVTKCTESLVNRRPCFSALEVDYVPEKFAETFTFHADI 602
538 SVYLNQLCVLHEKTPVSDRVTKCTESLVNRRPCFSALEVDYVPEKFAETFTFHADI 597
603 CTLSEKERQIKKQOTALVELVHKRPKATKQQLKAVMDPFAAFVEKCKADDKETCFABEGK 662
598 CTLSEKERQIKKQOTALVELVHKRPKATKQQLKAVMDPFAAFVEKCKADDKETCFABEGK 657
663 KLVAAASQAALGL 674
658 KLVAAASQAALGL 669

PRIOR APPLICATION NUMBER: 60/398,008
PRIOR FILING DATE: 2002-07-24
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR FILING DATE: 2002-09-18
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR FILING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: 60/417,611
PRIOR FILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/420,246
PRIOR FILING DATE: 2002-10-23
PRIOR APPLICATION NUMBER: 60/423,623
PRIOR FILING DATE: 2002-11-05
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 858
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 423
LENGTH: 669
TYPE: PRT
ORGANISM: Homo sapiens
US-10-775-180-423

Query Match 96.2%; Score 3432.5; DB 5; Length 669;
Best Local Similarity 97.0%; Pred. No. 5,9e-260;
Matches 652; Conservative 4; Mismatches 7; Indels 9; Gaps 1;

3 IFYIFPLLSFVQGLBHTHRGSLDKRGGFTSDVSSYILSGQAAKERFIAMLVKGRHGE 62
7 ISLFLPSSAYSR-----SLDKRHAEGFTSDVSSYILSGQAAKERFIAMLVKGRHAB 57
63 GFTSDVSSYILSGQAAKERFIAMLVKGRDAHKSEVAHRFKDLGSENFKALVLIAPAYLQO 122
58 GFTSDVSSYILSGQAAKERFIAMLVKGRDAHKSEVAHRFKDLGSENFKALVLIAPAYLQO 117
123 CPREDHVKLVNVEYTERFAKTCVADSEANCDKSLHTLFGDKLCTVATLRETYGEMADCCAK 182
118 CPREDHVKLVNVEYTERFAKTCVADSEANCDKSLHTLFGDKLCTVATLRETYGEMADCCAK 177
183 QEBERNCEFLQHKDDNPNLPRIVRPEVDVMTAFHNDNEBTFLLKCYLYEIRARRHPYFAPE 242
178 QEBERNCEFLQHKDDNPNLPRIVRPEVDVMTAFHNDNEBTFLLKCYLYEIRARRHPYFAPE 237
243 LFFPAKRYKAAFTFCCQAADKAACLLPKLDLDEBEGKASSAKORLKCASIQKRGGERAFKA 302
238 LFFPAKRYKAAFTFCCQAADKAACLLPKLDLDEBEGKASSAKORLKCASIQKRGGERAFKA 297
303 WAAVARLSORPPKAEFAVSKLVITDILTKVHTTECCGDLLECADRADIKAYICENODSIS 362
298 WAAVARLSORPPKAEFAVSKLVITDILTKVHTTECCGDLLECADRADIKAYICENODSIS 357
363 KLRKCECEKPLLEKSHCIARVENDEMPADLPSLAADPVESKDVCKNYABAKDVLGMFLYE 422
358 KLRKCECEKPLLEKSHCIARVENDEMPADLPSLAADPVESKDVCKNYABAKDVLGMFLYE 417
423 YARRHPDYVLLLRILAKTYETTLKCCAAADPHECYAVKVPDEFKPLVEBPQMLIKONCE 482
418 YARRHPDYVLLLRILAKTYETTLKCCAAADPHECYAVKVPDEFKPLVEBPQMLIKONCE 477
483 LPEQLGEBYKFNALLVRYTKKPVQVSTPPLVBSRNILGKVGSKCCGHPBAKRRPCABDYL 542
478 LPEQLGEBYKFNALLVRYTKKPVQVSTPPLVBSRNILGKVGSKCCGHPBAKRRPCABDYL 537
543 SVYLNQLCVLHEKTPVSDRVTKCTESLVNRRPCFSALEVDYVPEKFAETFTFHADI 602
538 SVYLNQLCVLHEKTPVSDRVTKCTESLVNRRPCFSALEVDYVPEKFAETFTFHADI 597
603 CTLSEKERQIKKQOTALVELVHKRPKATKQQLKAVMDPFAAFVEKCKADDKETCFABEGK 662
598 CTLSEKERQIKKQOTALVELVHKRPKATKQQLKAVMDPFAAFVEKCKADDKETCFABEGK 657
663 KLVAAASQAALGL 674
658 KLVAAASQAALGL 669

RESULT 13
US-10-775-180-423
Sequence 423, Application US/10775180
Publication No. US2005054570A1
GENERAL INFORMATION:
APPLICANT: Rosen, Craig A.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: P574
CURRENT APPLICATION NUMBER: US/10/775,180
PRIOR FILING DATE: 2004-02-11
PRIOR APPLICATION NUMBER: PCT/US02/40892
PRIOR FILING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR FILING DATE: 2002-02-28
PRIOR APPLICATION NUMBER: 60/378,950
PRIOR FILING DATE: 2002-05-10


```

Db      58  GTFSTSVSYLBEQAAKBFJAMLVGRDAHKSEVAHRFKDLGEBNFKALVLIIFAQYLQO 117
QY      123  CPEPDHVKLVNBEVTEPAKTCVADESAANDCKSLHTLPGDKLCTVATLRETYGEMADCCAK 182
Db      118  CPEPDHVKLVNBEVTEPAKTCVADESAANDCKSLHTLPGDKLCTVATLRETYGEMADCCAK 177
QY      183  QEBERBRCFLQHKDDNPNLPRLVPRPVWVCTAFHNDNEETFLKCYLYETARRHPYFYAPE 242
Db      178  QEBERBRCFLQHKDDNPNLPRLVPRPVWVCTAFHNDNEETFLKCYLYETARRHPYFYAPE 237
QY      243  LLFPAKRYKAFTFCCOAAADKAACLLPKLDELDRDEBKASSAKORLKCASIQKFGERRAFKA 302
Db      238  LLFPAKRYKAFTFCCOAAADKAACLLPKLDELDRDEBKASSAKORLKCASIQKFGERRAFKA 297
QY      303  WAAVARLSORPPKAEFAVBSKLVTDLTKVHTTECCHGDLLEGADPRADLAKYICENODSIS8 362
Db      298  WAAVARLSORPPKAEFAVBSKLVTDLTKVHTTECCHGDLLEGADPRADLAKYICENODSIS8 357
QY      363  KJKECCBKPLLEKSHCIAVENDEMPADLPSLAAADPVESKDVCKNYAABAQVFLGMPLYE 422
Db      358  KJKECCBKPLLEKSHCIAVENDEMPADLPSLAAADPVESKDVCKNYAABAQVFLGMPLYE 417
QY      423  YARRHPDYVAVLLLRILAKTYETTLERKCCAAADPHECYAKVDFEKPVLVEBPONLIKONCE 482
Db      418  YARRHPDYVAVLLLRILAKTYETTLERKCCAAADPHECYAKVDFEKPVLVEBPONLIKONCE 477
QY      483  LFEQLGEYKFNALLVRYTKKVPQVSTPTLVVVSRLNGKYGSKCKRPEAKRMPCABDYL 542
Db      478  LFEQLGEYKFNALLVRYTKKVPQVSTPTLVVVSRLNGKYGSKCKRPEAKRMPCABDYL 537
QY      543  SVVLANOLCVLHEKTPVSDRYTKCCTESLVNRRPCFSALAEVDETYVPEFNAETFTFHADI 602
Db      538  SVVLANOLCVLHEKTPVSDRYTKCCTESLVNRRPCFSALAEVDETYVPEFNAETFTFHADI 597
QY      603  CTLSEKERQIKKOTALVELVHKHPKATKBOJKAVMDDPAAFAVEKCCAKADDKETCFABEGK 662
Db      598  CTLSEKERQIKKOTALVELVHKHPKATKBOJKAVMDDPAAFAVEKCCAKADDKETCFABEGK 657
QY      663  KLVVAASQALGL 674
Db      658  KLVVAASQALGL 669

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Search completed: April 19, 2006, 12:35:48
 Job time : 144.172 secs

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GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 19, 2006, 12:31:03 ; Search time 22.4986 Seconds
(without alignments)
1318.215 Million cell updates/sec

Title: US-10-775-180-447

Perfect score: 3568
Sequence: 1 MNIFPFLPLFLSPVQGLEHT.....TCRAERGRKLVASQALGL 674

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 225428 seqs, 44002918 residues

Total number of hits satisfying chosen parameters: 225428

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-Processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA New:*
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2: /SIDS5/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
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8: /SIDS5/ptodata/1/pubpaa/US60_NEW_PUB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3568	100.0	674	US-11-175-690-206	Sequence 206, App
2	3568	100.0	915	US-11-175-690-208	Sequence 208, App
3	3401	95.3	658	US-11-175-690-210	Sequence 210, App
4	3395	95.2	654	US-11-175-690-219	Sequence 219, App
5	3395	95.2	656	US-11-175-690-225	Sequence 225, App
6	3393	95.1	650	US-11-175-690-209	Sequence 209, App
7	3392.5	95.1	655	US-11-175-690-220	Sequence 220, App
8	3392.5	95.1	657	US-11-175-690-216	Sequence 216, App
9	3392.5	95.1	657	US-11-175-690-303	Sequence 303, App
10	3391.5	95.1	653	US-11-175-690-218	Sequence 218, App
11	3391	95.0	652	US-11-175-690-215	Sequence 215, App
12	3390.5	95.0	659	US-11-175-690-221	Sequence 221, App
13	3389	95.0	648	US-11-175-690-214	Sequence 214, App
14	3387.5	94.9	651	US-11-175-690-224	Sequence 224, App
15	3386.5	94.9	647	US-11-175-690-212	Sequence 212, App
16	3386.5	94.9	646	US-11-175-690-213	Sequence 213, App
17	3386	94.9	646	US-11-175-690-223	Sequence 223, App
18	3214	90.1	779	US-11-175-690-205	Sequence 205, App
19	3198	89.6	646	US-11-175-690-276	Sequence 276, App
20	3190	89.4	678	US-11-175-690-274	Sequence 274, App
21	3182	89.2	642	US-11-175-690-238	Sequence 238, App
22	3176	89.0	642	US-11-175-690-233	Sequence 233, App
23	3171.5	88.9	647	US-11-175-690-242	Sequence 242, App
24	3159	88.5	636	US-11-175-690-268	Sequence 268, App
25	3158	88.5	636	US-11-175-690-278	Sequence 278, App

ALIGNMENTS

RESULT 1	US-11-175-690-206	US-11-175-690-240				
26	3154	88.4	636	7	US-11-175-690-240	Sequence 240, App
27	3144.5	89.1	693	7	US-11-175-690-199	Sequence 199, App
28	3137.5	87.9	688	7	US-11-175-690-198	Sequence 198, App
29	3134.5	87.9	637	7	US-11-175-690-286	Sequence 286, App
30	3131.5	87.8	629	7	US-11-175-690-582	Sequence 582, App
31	3126	87.6	728	7	US-11-175-690-244	Sequence 244, App
32	3126	87.6	728	7	US-11-175-690-246	Sequence 246, App
33	3126	87.6	728	7	US-11-175-690-248	Sequence 248, App
34	3125.5	87.6	672	7	US-11-175-690-200	Sequence 200, App
35	3122.5	87.5	673	7	US-11-175-690-201	Sequence 201, App
36	3118.5	87.4	667	7	US-11-175-690-227	Sequence 227, App
37	3116.5	87.3	673	7	US-11-175-690-217	Sequence 217, App
38	3116.5	87.3	673	7	US-11-175-690-231	Sequence 231, App
39	3116	87.3	728	7	US-11-175-690-254	Sequence 254, App
40	3115.5	87.3	663	7	US-11-175-690-284	Sequence 284, App
41	3112.5	87.2	634	7	US-11-175-690-207	Sequence 207, App
42	3112.5	87.2	665	7	US-11-175-690-282	Sequence 282, App
43	3111.5	87.2	661	7	US-11-175-690-281	Sequence 281, App
44	3110	87.2	742	7	US-11-175-690-525	Sequence 525, App
45	3109.5	87.1	638	7	US-11-175-690-229	Sequence 229, App

Query Match 100.0%; Score 3568; DB 7; Length 674;
Best Local Similarity 100.0%; Pred. No. 2.3e-274; Indels 0; Gaps 0;
Matches 674; Conservative 0; Mismatches 0;

Query: 1 MNIFPFLPLFLSPVQGLEHTHRGSLDKRGRGTFPSDVSSYLEGQAAKEFLAMLVKGRH 60
DB: 1 MNIFPFLPLFLSPVQGLEHTHRGSLDKRGRGTFPSDVSSYLEGQAAKEFLAMLVKGRH 60

Query: 61 GEGFTPSDVSSYLEGQAAKEFLAMLVKGRDAHKSVEVAHRFKDVGGENFALVLAFAQYL 120
DB: 61 GEGFTPSDVSSYLEGQAAKEFLAMLVKGRDAHKSVEVAHRFKDVGGENFALVLAFAQYL 120

Query: 121 QCCPFBDHYVLYVNEVTEFAKTCVADESSAENCDKSLHTLFGDKLCTVYATLRETYGEMADCC 180

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Db      121  OCPPEHDVYKLVNVEYTEFAKTCVADESAENCDKSIHTLTFGDKLCTVATLRETYGEMADCC 180
Qy      181  AKQEBRRNECFLOHKDDNPNLPRIVRPEVDWCTAFHNDERTFLKKYLYEIAARRHPFYA 240
Db      181  AKQEBRRNECFLOHKDDNPNLPRIVRPEVDWCTAFHNDERTFLKKYLYEIAARRHPFYA 240
Qy      241  PELLPFAKRYKAAFTFECOAADKAACLLPKLDLREDEGKASSAKORLKCASIQKFGERA 300
Db      241  PELLPFAKRYKAAFTFECOAADKAACLLPKLDLREDEGKASSAKORLKCASIQKFGERA 300
Qy      301  KAMAVARLSQRPPKAEPAVSKLVTDLTKVHTFECGDLBGCADDRADLAKYICENODSI 360
Db      301  KAMAVARLSQRPPKAEPAVSKLVTDLTKVHTFECGDLBGCADDRADLAKYICENODSI 360
Qy      361  SSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADPVESKDVCNVAABAQVFLGML 420
Db      361  SSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADPVESKDVCNVAABAQVFLGML 420
Qy      421  YEYARRHPDYSVVLILRLAKTYETTLERKCCAAADPHCYAKVDFEKPVLVEBPONLIKON 480
Db      421  YEYARRHPDYSVVLILRLAKTYETTLERKCCAAADPHCYAKVDFEKPVLVEBPONLIKON 480
Qy      481  CELFQELGEEKFQNALVRYTKVQVSTPTLVESRNIGKVGSKCCGKPEAKRMPCEAD 540
Db      481  CELFQELGEEKFQNALVRYTKVQVSTPTLVESRNIGKVGSKCCGKPEAKRMPCEAD 540
Qy      541  YLSVVALNQLCVLHEKTPVSDRVTKCTESTLVNRRPFSALBVDYTYVPEFNALETFTFHA 600
Db      541  YLSVVALNQLCVLHEKTPVSDRVTKCTESTLVNRRPFSALBVDYTYVPEFNALETFTFHA 600
Qy      601  DICTLSEKEROIKKQATALVELVHKPKATKEQLKAVMDDFAAFVEKCCKADDKETCFPAE 660
Db      601  DICTLSEKEROIKKQATALVELVHKPKATKEQLKAVMDDFAAFVEKCCKADDKETCFPAE 660
Qy      661  GKGLVAASQAALGL 674
Db      661  GKGLVAASQAALGL 674

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Query Match      100.0%; Score 3568; DB 7; Length 915;
Best Local Similarity 100.0%; Pred. No. 3,4e-274;
Matches 674; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  MNIFYIFLFLSPQGLAHTHRGSLDRKRGEGFTSPVSSYLBGQAKKEFIAMLVKRRH 60
Db      1  MNIFYIFLFLSPQGLAHTHRGSLDRKRGEGFTSPVSSYLBGQAKKEFIAMLVKRRH 60
Qy      61  GEFTTSDVSSYLBGQAKKEFIAMLVKGRDAHKSEVARRFYDLGSENFKALVLAFAQYL 120
Db      61  GEFTTSDVSSYLBGQAKKEFIAMLVKGRDAHKSEVARRFYDLGSENFKALVLAFAQYL 120
Qy      121  OCPPEHDVYKLVNVEYTEFAKTCVADESAENCDKSIHTLTFGDKLCTVATLRETYGEMADCC 180
Db      121  OCPPEHDVYKLVNVEYTEFAKTCVADESAENCDKSIHTLTFGDKLCTVATLRETYGEMADCC 180
Qy      181  AKQEBRRNECFLOHKDDNPNLPRIVRPEVDWCTAFHNDERTFLKKYLYEIAARRHPFYA 240
Db      181  AKQEBRRNECFLOHKDDNPNLPRIVRPEVDWCTAFHNDERTFLKKYLYEIAARRHPFYA 240
Qy      241  PELLPFAKRYKAAFTFECOAADKAACLLPKLDLREDEGKASSAKORLKCASIQKFGERA 300
Db      241  PELLPFAKRYKAAFTFECOAADKAACLLPKLDLREDEGKASSAKORLKCASIQKFGERA 300
Qy      301  KAMAVARLSQRPPKAEPAVSKLVTDLTKVHTFECGDLBGCADDRADLAKYICENODSI 360
Db      301  KAMAVARLSQRPPKAEPAVSKLVTDLTKVHTFECGDLBGCADDRADLAKYICENODSI 360
Qy      361  SSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADPVESKDVCNVAABAQVFLGML 420
Db      361  SSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADPVESKDVCNVAABAQVFLGML 420
Qy      421  YEYARRHPDYSVVLILRLAKTYETTLERKCCAAADPHCYAKVDFEKPVLVEBPONLIKON 480
Db      421  YEYARRHPDYSVVLILRLAKTYETTLERKCCAAADPHCYAKVDFEKPVLVEBPONLIKON 480
Qy      481  CELFQELGEEKFQNALVRYTKVQVSTPTLVESRNIGKVGSKCCGKPEAKRMPCEAD 540
Db      481  CELFQELGEEKFQNALVRYTKVQVSTPTLVESRNIGKVGSKCCGKPEAKRMPCEAD 540
Qy      541  YLSVVALNQLCVLHEKTPVSDRVTKCTESTLVNRRPFSALBVDYTYVPEFNALETFTFHA 600
Db      541  YLSVVALNQLCVLHEKTPVSDRVTKCTESTLVNRRPFSALBVDYTYVPEFNALETFTFHA 600
Qy      601  DICTLSEKEROIKKQATALVELVHKPKATKEQLKAVMDDFAAFVEKCCKADDKETCFPAE 660
Db      601  DICTLSEKEROIKKQATALVELVHKPKATKEQLKAVMDDFAAFVEKCCKADDKETCFPAE 660
Qy      661  GKGLVAASQAALGL 674
Db      661  GKGLVAASQAALGL 674

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RESULT 2
US-11-175-690-208
; Sequence 208, Application US/11175690
; Publication No. US20060014254A1
; GENERAL INFORMATION:
; APPLICANT: Haseltine et al.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF605
; CURRENT APPLICATION NUMBER: US/11/175, 690
; CURRENT FILING DATE: 2005-07-07
; PRIOR APPLICATION NUMBER: PCT/US04/001369
; PRIOR FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: US 60/441,305
; PRIOR FILING DATE: 2003-01-22
; PRIOR APPLICATION NUMBER: US 60/453,201
; PRIOR FILING DATE: 2003-03-11
; PRIOR APPLICATION NUMBER: US 60/467,222
; PRIOR FILING DATE: 2003-05-02
; PRIOR APPLICATION NUMBER: US 60/472,816
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 60/476,267
; PRIOR FILING DATE: 2003-06-06
; PRIOR APPLICATION NUMBER: US 60/505,172
; PRIOR FILING DATE: 2003-09-24
; PRIOR APPLICATION NUMBER: US 60/506,746
; PRIOR FILING DATE: 2003-09-30
; NUMBER OF SEQ ID NOS: 568
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 208
; LENGTH: 915
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-11-175-690-208

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RESULT 3
US-11-175-690-210
; Sequence 210, Application US/11175690
; Publication No. US20060014254A1
; GENERAL INFORMATION:
; APPLICANT: Haseltine et al.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF605
; CURRENT APPLICATION NUMBER: US/11/175, 690
; CURRENT FILING DATE: 2005-07-07
; PRIOR APPLICATION NUMBER: PCT/US04/001369
; PRIOR FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: US 60/441,305
; PRIOR FILING DATE: 2003-01-22
; PRIOR APPLICATION NUMBER: US 60/453,201
; PRIOR FILING DATE: 2003-03-11
; PRIOR APPLICATION NUMBER: US 60/467,222
; PRIOR FILING DATE: 2003-05-02
; PRIOR APPLICATION NUMBER: US 60/472,816
; PRIOR FILING DATE: 2003-05-23

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PRIOR APPLICATION NUMBER: US 60/476,267
 PRIOR FILING DATE: 2003-06-06
 PRIOR APPLICATION NUMBER: US 60/505,172
 PRIOR FILING DATE: 2003-09-24
 PRIOR APPLICATION NUMBER: US 60/506,746
 PRIOR FILING DATE: 2003-09-30
 NUMBER OF SEQ ID NOS: 568
 SOFTWARE: Patent In Ver. 2.0
 SEQ ID NO 210
 LENGTH: 658
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-11-175-690-210

Query Match 95.3%; Score 3401; DB 7; Length 658;
 Best Local Similarity 96.1%; Pred. No. 3,6e-261;
 Matches 648; Conservative 1; Mismatches 9; Indels 16; Gaps 1;

1 MNI FYI FLPLS FVOGL EHTHRGSLDKRHGGSTFSDVSSYLEGQAQKFIAMLVKGRH 60
 1 MNI FYI FLPLS FVOGL EHTHRGSLDKRHGGSTFSDVSSYLEGQAQKFIAMLVKGR 60
 1 MNI FYI FLPLS FVOGL EHTHRGSLDKRHGGSTFSDVSSYLEGQAQKFIAMLVKGR 59
 61 GEGFTSDVSSYLEGQAQKFIAMLVKGRDAHKSEVVAHRFKDVGSENFKALVLIARFAQYL 120
 60 -----DAHKSEVVAHRFKDVGSENFKALVLIARFAQYL 104
 121 QGCPFDHVKLVNEVTEFAKTCVADSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCC 180
 105 QGCPFDHVKLVNEVTEFAKTCVADSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCC 164
 181 AKQEPRENEGFLQHKDNPMLPRLVREVDVWCTAFHNDNEFTLKKYLYEIAARRHPYFA 240
 165 AKQEPRENEGFLQHKDNPMLPRLVREVDVWCTAFHNDNEFTLKKYLYEIAARRHPYFA 224
 241 PELLFPAKRYKAAFTCCQAADKAACILPKLDELDRDEGKASSAKORLKCASLQKFGERRAP 300
 225 PELLFPAKRYKAAFTCCQAADKAACILPKLDELDRDEGKASSAKORLKCASLQKFGERRAP 284
 301 KANAVALRSQRPFAKAEFAVSKLVTDLTKVHTTECCGDIIECADRDADLAKYICENODSI 360
 285 KANAVALRSQRPFAKAEFAVSKLVTDLTKVHTTECCGDIIECADRDADLAKYICENODSI 344
 361 SSKLKECCERPLLEKSHCI AEVNDMPADLPSLAADPVESKDYCKNYAERAKOVFLGMFL 420
 345 SSKLKECCERPLLEKSHCI AEVNDMPADLPSLAADPVESKDYCKNYAERAKOVFLGMFL 404
 421 YEYARRHPDYSVVLILRLAKTYETTLLEKCCAAADPHCECYAKVDFEFPRLVBEPPONLIKON 480
 405 YEYARRHPDYSVVLILRLAKTYETTLLEKCCAAADPHCECYAKVDFEFPRLVBEPPONLIKON 464
 481 CELFEQIGBYKFNALLVRYTKKVPQVSTPTLVEVSRNLGKVGSKCCGHPBAKRMPCABD 540
 465 CELFEQIGBYKFNALLVRYTKKVPQVSTPTLVEVSRNLGKVGSKCCGHPBAKRMPCABD 524
 541 YLSVVAQLCVLHEKTPVSDRYTKKVPQVSTPTLVEVSRNLGKVGSKCCGHPBAKRMPCABD 600
 525 YLSVVAQLCVLHEKTPVSDRYTKKVPQVSTPTLVEVSRNLGKVGSKCCGHPBAKRMPCABD 584
 601 DICTLSEKEROIKKQTLVLELVKHKPKATKSEQLRKAVWDDPFAAFVBEKCCAKADKETCFABE 660
 585 DICTLSEKEROIKKQTLVLELVKHKPKATKSEQLRKAVWDDPFAAFVBEKCCAKADKETCFABE 644
 661 GKKLVAASQAALGL 674
 645 GKKLVAASQAALGL 658

RESULT 4
 US-11-175-690-219
 ; Sequence 219, Application US/11175690
 ; Publication No. US20060014254A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Haseeltine et al.

TITLE OF INVENTION: Albumin Fusion Proteins
 FILE REFERENCE: PF605
 CURRENT APPLICATION NUMBER: US/11/175,690
 CURRENT FILING DATE: 2005-07-07
 PRIOR APPLICATION NUMBER: PCT/US04/001369
 PRIOR FILING DATE: 2004-01-20
 PRIOR APPLICATION NUMBER: US 60/441,305
 PRIOR FILING DATE: 2003-01-22
 PRIOR APPLICATION NUMBER: US 60/453,201
 PRIOR FILING DATE: 2003-03-11
 PRIOR APPLICATION NUMBER: US 60/467,222
 PRIOR FILING DATE: 2003-05-02
 PRIOR APPLICATION NUMBER: US 60/472,816
 PRIOR FILING DATE: 2003-05-23
 PRIOR APPLICATION NUMBER: US 60/476,267
 PRIOR FILING DATE: 2003-06-06
 PRIOR APPLICATION NUMBER: US 60/505,172
 PRIOR FILING DATE: 2003-09-24
 PRIOR APPLICATION NUMBER: US 60/506,746
 PRIOR FILING DATE: 2003-09-30
 NUMBER OF SEQ ID NOS: 568
 SOFTWARE: Patent In Ver. 2.0
 SEQ ID NO 219
 LENGTH: 654
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-11-175-690-219

Query Match 95.2%; Score 3395; DB 7; Length 654;
 Best Local Similarity 96.1%; Pred. No. 1.1e-260;
 Matches 648; Conservative 1; Mismatches 5; Indels 20; Gaps 2;

1 MNI FYI FLPLS FVOGL EHTHRGSLDKRHGGSTFSDVSSYLEGQAQKFIAMLVKGRH 60
 1 MNI FYI FLPLS FVOGL EHTHRGSLDKRHGGSTFSDVSSYLEGQAQKFIAMLVKGR 59
 61 GEGFTSDVSSYLEGQAQKFIAMLVKGRDAHKSEVVAHRFKDVGSENFKALVLIARFAQYL 120
 60 -----DAHKSEVVAHRFKDVGSENFKALVLIARFAQYL 100
 121 QGCPFDHVKLVNEVTEFAKTCVADSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCC 180
 101 QGCPFDHVKLVNEVTEFAKTCVADSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCC 160
 181 AKQEPRENEGFLQHKDNPMLPRLVREVDVWCTAFHNDNEFTLKKYLYEIAARRHPYFA 240
 161 AKQEPRENEGFLQHKDNPMLPRLVREVDVWCTAFHNDNEFTLKKYLYEIAARRHPYFA 220
 241 PELLFPAKRYKAAFTCCQAADKAACILPKLDELDRDEGKASSAKORLKCASLQKFGERRAP 300
 221 PELLFPAKRYKAAFTCCQAADKAACILPKLDELDRDEGKASSAKORLKCASLQKFGERRAP 280
 301 KANAVALRSQRPFAKAEFAVSKLVTDLTKVHTTECCGDIIECADRDADLAKYICENODSI 360
 281 KANAVALRSQRPFAKAEFAVSKLVTDLTKVHTTECCGDIIECADRDADLAKYICENODSI 340
 361 SSKLKECCERPLLEKSHCI AEVNDMPADLPSLAADPVESKDYCKNYAERAKOVFLGMFL 420
 341 SSKLKECCERPLLEKSHCI AEVNDMPADLPSLAADPVESKDYCKNYAERAKOVFLGMFL 400
 421 YEYARRHPDYSVVLILRLAKTYETTLLEKCCAAADPHCECYAKVDFEFPRLVBEPPONLIKON 480
 401 YEYARRHPDYSVVLILRLAKTYETTLLEKCCAAADPHCECYAKVDFEFPRLVBEPPONLIKON 460
 481 CELFEQIGBYKFNALLVRYTKKVPQVSTPTLVEVSRNLGKVGSKCCGHPBAKRMPCABD 540
 461 CELFEQIGBYKFNALLVRYTKKVPQVSTPTLVEVSRNLGKVGSKCCGHPBAKRMPCABD 520
 541 YLSVVAQLCVLHEKTPVSDRYTKKVPQVSTPTLVEVSRNLGKVGSKCCGHPBAKRMPCABD 600
 521 YLSVVAQLCVLHEKTPVSDRYTKKVPQVSTPTLVEVSRNLGKVGSKCCGHPBAKRMPCABD 580
 601 DICTLSEKEROIKKQTLVLELVKHKPKATKSEQLRKAVWDDPFAAFVBEKCCAKADKETCFABE 660

RESULT 4
 US-11-175-690-219
 ; Sequence 219, Application US/11175690
 ; Publication No. US20060014254A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Haseeltine et al.

DB 581 DICTLSEKERQIKKQTAALVELVGHKPKATKEQLKAVMDFFAFAFVEKCCKADDKETCFABE 640
 QY 661 GKQLVAASQALGL 674
 DB 641 GKQLVAASQALGL 654

RESULT 5

US-11-175-690-225
 ; Sequence 225, Application US/11175690
 ; Publication No. US20060014254A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Haseltine et al.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PF605
 ; CURRENT APPLICATION NUMBER: US/11/175,690
 ; CURRENT FILING DATE: 2003-07-07
 ; PRIOR APPLICATION NUMBER: PCT/US04/001369
 ; PRIOR FILING DATE: 2004-01-20
 ; PRIOR APPLICATION NUMBER: US 60/441,305
 ; PRIOR FILING DATE: 2003-01-22
 ; PRIOR APPLICATION NUMBER: US 60/453,201
 ; PRIOR FILING DATE: 2003-03-11
 ; PRIOR APPLICATION NUMBER: US 60/467,222
 ; PRIOR FILING DATE: 2003-05-02
 ; PRIOR APPLICATION NUMBER: US 60/472,816
 ; PRIOR FILING DATE: 2003-05-23
 ; PRIOR APPLICATION NUMBER: US 60/476,267
 ; PRIOR FILING DATE: 2003-06-06
 ; PRIOR APPLICATION NUMBER: US 60/505,172
 ; PRIOR FILING DATE: 2003-09-24
 ; PRIOR APPLICATION NUMBER: US 60/506,746
 ; PRIOR FILING DATE: 2003-09-30
 ; NUMBER OF SEQ ID NOS: 568
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 225
 ; LENGTH: 656
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-11-175-690-225

Query Match 95.2%; Score 3395; DB 7; Length 656;
 Best Local Similarity 95.8%; Pred. No. 1.1e-260;
 Matches 646; Conservative 3; Mismatches 7; Indels 18; Gaps 2;

QY 1 MNIFYIFLFLSVVQGLBHTHRRGSLDKRHGEGTFTSDVSYLBEQAAKEFIAMLVKGRH 60
 DB 1 MNIFYIFLFLSVVQGLBHTHRRGSLDKRHGEGTFTSDVSYLBEQAAKEFIAMLVKGRD 60
 QY 61 GEGTFTSDVSYLBEQAAKEFIAMLVKGRDAHKSEVAHRFKDLGSENFKALVLIAPAOYL 120
 DB 61 AH-----KSEVAHRF-----KDAHKSEVAHRFKDLGSENFKALVLIAPAOYL 102
 QY 121 QCCPFEDHVKLVNEVTEFAKTCVADESANCDKSLHTLFGDKLCTVATLRETYGEMADCC 180
 DB 103 QCCPFEDHVKLVNEVTEFAKTCVADESANCDKSLHTLFGDKLCTVATLRETYGEMADCC 162
 QY 181 AKQEBRNECFLOHKDNDNPLRVLVPEVDVWCTAFHNEBETFLKLYLVEIARRHPYFYA 240
 DB 163 AKQEBRNECFLOHKDNDNPLRVLVPEVDVWCTAFHNEBETFLKLYLVEIARRHPYFYA 222
 QY 241 PELTFPAKRYKAAFTCCQAAADKAAQLRPLDELREDEGKASAKQRYLKAQSLQKFEGRAF 300
 DB 223 PELTFPAKRYKAAFTCCQAAADKAAQLRPLDELREDEGKASAKQRYLKAQSLQKFEGRAF 282
 QY 301 KMAVAVALSQRPPKAEFAVSKLVTDLTQVHTRECGHDLLECADRADI AKYI GENQDSI 360
 DB 283 KMAVAVALSQRPPKAEFAVSKLVTDLTQVHTRECGHDLLECADRADI AKYI GENQDSI 342
 QY 361 SSKLKECKEKPILLESKHCIAEVDNEMPADLPSLADPVESSDVCQNVAAADVPFLGMFL 420
 DB 343 SSKLKECKEKPILLESKHCIAEVDNEMPADLPSLADPVESSDVCQNVAAADVPFLGMFL 402

QY 421 YEYARRHPDYSVLLLRLLAKTYETTLKCCAAADPHCYAKVDFEPRKDLVBERPQMLIKON 480
 DB 403 YEYARRHPDYSVLLLRLLAKTYETTLKCCAAADPHCYAKVDFEPRKDLVBERPQMLIKON 462
 QY 481 CELFEOLEGEYKQNMALVRYTKVQVSTPPTLVEVSRNLGKVGSKCKHPEAKRBPACED 540
 DB 463 CELFEOLEGEYKQNMALVRYTKVQVSTPPTLVEVSRNLGKVGSKCKHPEAKRBPACED 522
 QY 541 YLSVLIANOLCVLHEKTPVSDRVTKCTESLVNRRPCFSALAEVDEFTYVPEFNAETFTFHA 600
 DB 523 YLSVLIANOLCVLHEKTPVSDRVTKCTESLVNRRPCFSALAEVDEFTYVPEFNAETFTFHA 582
 QY 601 DICTLSEKERQIKKQTAALVELVGHKPKATKEQLKAVMDFFAFAFVEKCCKADDKETCFABE 660
 DB 583 DICTLSEKERQIKKQTAALVELVGHKPKATKEQLKAVMDFFAFAFVEKCCKADDKETCFABE 642
 QY 661 GKQLVAASQALGL 674
 DB 643 GKQLVAASQALGL 656

RESULT 6

US-11-175-690-209
 ; Sequence 209, Application US/11175690
 ; Publication No. US20060014254A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Haseltine et al.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PF605
 ; CURRENT APPLICATION NUMBER: US/11/175,690
 ; CURRENT FILING DATE: 2005-07-07
 ; PRIOR APPLICATION NUMBER: PCT/US04/001369
 ; PRIOR FILING DATE: 2004-01-20
 ; PRIOR APPLICATION NUMBER: US 60/441,305
 ; PRIOR FILING DATE: 2003-01-22
 ; PRIOR APPLICATION NUMBER: US 60/453,201
 ; PRIOR FILING DATE: 2003-03-11
 ; PRIOR APPLICATION NUMBER: US 60/467,222
 ; PRIOR FILING DATE: 2003-05-02
 ; PRIOR APPLICATION NUMBER: US 60/472,816
 ; PRIOR FILING DATE: 2003-05-23
 ; PRIOR APPLICATION NUMBER: US 60/476,267
 ; PRIOR FILING DATE: 2003-06-06
 ; PRIOR APPLICATION NUMBER: US 60/505,172
 ; PRIOR FILING DATE: 2003-09-24
 ; PRIOR APPLICATION NUMBER: US 60/506,746
 ; PRIOR FILING DATE: 2003-09-30
 ; NUMBER OF SEQ ID NOS: 568
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 209
 ; LENGTH: 650
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-11-175-690-209

Query Match 95.1%; Score 3393; DB 7; Length 650;
 Best Local Similarity 95.7%; Pred. No. 1.5e-260;
 Matches 645; Conservative 0; Mismatches 5; Indels 24; Gaps 1;

QY 1 MNIFYIFLFLSVVQGLBHTHRRGSLDKRHGEGTFTSDVSYLBEQAAKEFIAMLVKGRH 60
 DB 1 MNIFYIFLFLSVVQGLBHTHRRGSLDKRHGEGTFTSDVSYLBEQAAKEFIAMLVKGRD 60
 QY 61 GEGTFTSDVSYLBEQAAKEFIAMLVKGRDAHKSEVAHRFKDLGSENFKALVLIAPAOYL 120
 DB 61 AH-----KSDAHKSEVAHRFKDLGSENFKALVLIAPAOYL 96
 QY 121 QCCPFEDHVKLVNEVTEFAKTCVADESANCDKSLHTLFGDKLCTVATLRETYGEMADCC 180
 DB 97 QCCPFEDHVKLVNEVTEFAKTCVADESANCDKSLHTLFGDKLCTVATLRETYGEMADCC 156
 QY 181 AKQEBRNECFLOHKDNDNPLRVLVPEVDVWCTAFHNEBETFLKLYLVEIARRHPYFYA 240

DB 157 AQGPERNECFLOHNDNPNLPRLVPEVDVWCTAHDNEBETLKKYLVYIARRHPYFA 216
 OY 241 PELLFPARKYKAAFTFCCQADKAACLLPKLDLDRBEGKASSAKORLKCASIQKGERAF 300
 DB 217 PELLFPARKYKAAFTFCCQADKAACLLPKLDLDRBEGKASSAKORLKCASIQKGERAF 276
 OY 301 KAAVAARLSORPPKAEFAVSKLVYDITVKVHTCCGHDLECGADBRADLAKYICENQDSI 360
 DB 277 KAAVAARLSORPPKAEFAVSKLVYDITVKVHTCCGHDLECGADBRADLAKYICENQDSI 336
 OY 361 SSKLKECCCKPFLKESHCIAEVNDMPADLPSTLAADPVESSKDVCKNVAEAKDVFGLGML 420
 DB 337 SSKLKECCCKPFLKESHCIAEVNDMPADLPSTLAADPVESSKDVCKNVAEAKDVFGLGML 396
 OY 421 YEYARRHPDYSVLLLRLLAKTYETTLKCCAAADPHECTAKVDEKPLVEBPQNLIKON 480
 DB 397 YEYARRHPDYSVLLLRLLAKTYETTLKCCAAADPHECTAKVDEKPLVEBPQNLIKON 456
 OY 481 CELFEGQGEYKFNALVYTKKVPVSTPTLVEVSRNIGKYGSKCKKPEAKRMPGABD 540
 DB 457 CELFEGQGEYKFNALVYTKKVPVSTPTLVEVSRNIGKYGSKCKKPEAKRMPGABD 516
 OY 541 YLSVLANQLCVLHEKTPVSDRVTKCTESLVNRRPCEFSALAEVDETYVPEFNAETFTFA 600
 DB 517 YLSVLANQLCVLHEKTPVSDRVTKCTESLVNRRPCEFSALAEVDETYVPEFNAETFTFA 576
 OY 601 DICTLSEKERQIKKQALVELVGHKPKATKEQLKAVMDPFAAFVKECCGADDKETCFABE 660
 DB 577 DICTLSEKERQIKKQALVELVGHKPKATKEQLKAVMDPFAAFVKECCGADDKETCFABE 636
 OY 661 GKGLVAASQALGL 674
 DB 637 GKGLVAASQALGL 650

RESULT 7
 US-11-175-690-220
 ; Sequence 220, Application US/11175690
 ; Publication No. US20060014254A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Haseltine et al.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PF605
 ; CURRENT APPLICATION NUMBER: US/11/175,690
 ; CURRENT FILING DATE: 2005-07-07
 ; PRIOR APPLICATION NUMBER: PCT/US04/001369
 ; PRIOR FILING DATE: 2004-01-20
 ; PRIOR APPLICATION NUMBER: US 60/441,305
 ; PRIOR FILING DATE: 2003-01-22
 ; PRIOR APPLICATION NUMBER: US 60/453,201
 ; PRIOR FILING DATE: 2003-03-11
 ; PRIOR APPLICATION NUMBER: US 60/467,222
 ; PRIOR FILING DATE: 2003-05-02
 ; PRIOR APPLICATION NUMBER: US 60/472,816
 ; PRIOR FILING DATE: 2003-05-23
 ; PRIOR APPLICATION NUMBER: US 60/476,267
 ; PRIOR FILING DATE: 2003-06-06
 ; PRIOR APPLICATION NUMBER: US 60/505,172
 ; PRIOR FILING DATE: 2003-09-24
 ; PRIOR APPLICATION NUMBER: US 60/506,746
 ; PRIOR FILING DATE: 2003-09-30
 ; NUMBER OF SEQ ID NOS: 568
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 230
 ; LENGTH: 655
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-11-175-690-220
 Query Match 95.1%; Score 3392.5; DB 7; Length 655;
 Best Local Similarity 95.8%; Pred. No. 1.7e-260;
 Matches 646; Conservative 2; Mismatches 7; Indels 19; Gaps 2;

OY 1 NNI FYI FLFLS FVOGLEHTHRGSLDKRHGEGTSDVSSYLEGOAAKEFTAMLVKGRH 60
 DB 1 NNI FYI FLFLS FVOGLEHTHRGSLDKRHGEGTSDVSSYLEGOAAKEFTAMLVKGRH 60
 OY 61 GEGTSDVSSYLEGOAAKEFTAMLVKGRDHAKEVARRFDLGENEPRKALVIAPAQYL 120
 DB 61 AH-----KSEVHARF-----DAKSEVARRFKDLGENEPRKALVIAPAQYL 101
 OY 121 QOCPEPDHVKLVNEVETLBPFAKTCVADSEANCDKSLHTLFGDKLCTVAATLRETYGEMADCC 180
 DB 102 QOCPEPDHVKLVNEVETLBPFAKTCVADSEANCDKSLHTLFGDKLCTVAATLRETYGEMADCC 161
 OY 181 AQGPERNECFLOHNDNPNLPRLVPEVDVWCTAHDNEBETLKKYLVYIARRHPYFA 240
 DB 162 AQGPERNECFLOHNDNPNLPRLVPEVDVWCTAHDNEBETLKKYLVYIARRHPYFA 221
 OY 241 PELLFPARKYKAAFTFCCQADKAACLLPKLDLDRBEGKASSAKORLKCASIQKGERAF 300
 DB 222 PELLFPARKYKAAFTFCCQADKAACLLPKLDLDRBEGKASSAKORLKCASIQKGERAF 281
 OY 301 KAAVAARLSORPPKAEFAVSKLVYDITVKVHTCCGHDLECGADBRADLAKYICENQDSI 360
 DB 282 KAAVAARLSORPPKAEFAVSKLVYDITVKVHTCCGHDLECGADBRADLAKYICENQDSI 341
 OY 361 SSKLKECCCKPFLKESHCIAEVNDMPADLPSTLAADPVESSKDVCKNVAEAKDVFGLGML 420
 DB 342 SSKLKECCCKPFLKESHCIAEVNDMPADLPSTLAADPVESSKDVCKNVAEAKDVFGLGML 401
 OY 421 YEYARRHPDYSVLLLRLLAKTYETTLKCCAAADPHECTAKVDEKPLVEBPQNLIKON 480
 DB 402 YEYARRHPDYSVLLLRLLAKTYETTLKCCAAADPHECTAKVDEKPLVEBPQNLIKON 461
 OY 481 CELFEGQGEYKFNALVYTKKVPVSTPTLVEVSRNIGKYGSKCKKPEAKRMPGABD 540
 DB 462 CELFEGQGEYKFNALVYTKKVPVSTPTLVEVSRNIGKYGSKCKKPEAKRMPGABD 521
 OY 541 YLSVLANQLCVLHEKTPVSDRVTKCTESLVNRRPCEFSALAEVDETYVPEFNAETFTFA 600
 DB 522 YLSVLANQLCVLHEKTPVSDRVTKCTESLVNRRPCEFSALAEVDETYVPEFNAETFTFA 581
 OY 601 DICTLSEKERQIKKQALVELVGHKPKATKEQLKAVMDPFAAFVKECCGADDKETCFABE 660
 DB 582 DICTLSEKERQIKKQALVELVGHKPKATKEQLKAVMDPFAAFVKECCGADDKETCFABE 641
 OY 661 GKGLVAASQALGL 674
 DB 642 GKGLVAASQALGL 655

RESULT 8
 US-11-175-690-216
 ; Sequence 216, Application US/11175690
 ; Publication No. US20060014254A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Haseltine et al.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PF605
 ; CURRENT APPLICATION NUMBER: US/11/175,690
 ; CURRENT FILING DATE: 2005-07-07
 ; PRIOR APPLICATION NUMBER: PCT/US04/001369
 ; PRIOR FILING DATE: 2004-01-20
 ; PRIOR APPLICATION NUMBER: US 60/441,305
 ; PRIOR FILING DATE: 2003-01-22
 ; PRIOR APPLICATION NUMBER: US 60/453,201
 ; PRIOR FILING DATE: 2003-03-11
 ; PRIOR APPLICATION NUMBER: US 60/467,222
 ; PRIOR FILING DATE: 2003-05-02
 ; PRIOR APPLICATION NUMBER: US 60/472,816
 ; PRIOR FILING DATE: 2003-05-23
 ; PRIOR APPLICATION NUMBER: US 60/476,267
 ; PRIOR FILING DATE: 2003-06-06
 ; PRIOR APPLICATION NUMBER: US 60/505,172

QY 661 GKXUVAASQAALGL 674
DB 644 GKXUVAASQAALGL 657

RESULT 10

US-11-175-690-215
Sequence 215, Application US/11175690
Publication No. US20060014254A1
GENERAL INFORMATION:
APPLICANT: Haseltine et al.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PR605
CURRENT APPLICATION NUMBER: US/11/175,690
CURRENT FILING DATE: 2005-07-07
PRIOR APPLICATION NUMBER: PCT/US04/001369
PRIOR FILING DATE: 2004-01-20
PRIOR APPLICATION NUMBER: US 60/441,305
PRIOR FILING DATE: 2003-01-22
PRIOR APPLICATION NUMBER: US 60/453,201
PRIOR FILING DATE: 2003-03-11
PRIOR APPLICATION NUMBER: US 60/467,222
PRIOR FILING DATE: 2003-05-02
PRIOR APPLICATION NUMBER: US 60/472,816
PRIOR FILING DATE: 2003-05-23
PRIOR APPLICATION NUMBER: US 60/476,267
PRIOR FILING DATE: 2003-06-06
PRIOR APPLICATION NUMBER: US 60/505,172
PRIOR FILING DATE: 2003-09-24
PRIOR APPLICATION NUMBER: US 60/506,746
PRIOR FILING DATE: 2003-09-30
NUMBER OF SEQ ID NOS: 568
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 215
LENGTH: 653
TYPE: PRF
ORGANISM: Homo sapiens
US-11-175-690-215

Query Match 95.1%; Score 3391.5; DB 7; Length 653;
Best Local Similarity 96.0%; Pred. No. 2e-260;
Matches 647; Conservative 1; Mismatches 5; Indels 21; Gaps 2;

QY 1 MNTFYIPLFLISFVQGIERTHRGSLDKRKGEGTFTSDVSSYLEGQAARFIAMLVKGRH 60
DB 1 MNTFYIPLFLISFVQGIERTHRGSLDKRKGEGTFTSDVSSYLEGQAARFIAMLVKGR- 59
QY 61 GEGTFTSDVSSYLEGQAARFIAMLVKGRDARHKSSEVAHRFKDLGSENFKALVLIAPAOYL 120
DB 60 -----DARKSEVA-----HDARKSEVAHRFKDLGSENFKALVLIAPAOYL 99
QY 121 QCCPFEDHVKLVNEVTEFAKTCVADBSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCC 180
DB 100 QCCPFEDHVKLVNEVTEFAKTCVADBSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCC 159
QY 181 AKQEPRENECFLOHKDNDNPNLPRLVREVDVWCTAAPHNDNETFLKXLYEYIARRHPYFYA 240
DB 160 AKQEPRENECFLOHKDNDNPNLPRLVREVDVWCTAAPHNDNETFLKXLYEYIARRHPYFYA 219
QY 241 PELLFPARKRYKAAATECCOAAADKAAACLLPKLDELIRDSGKASAKORLCKASLQKRGRAAF 300
DB 220 PELLFPARKRYKAAATECCOAAADKAAACLLPKLDELIRDSGKASAKORLCKASLQKRGRAAF 279
QY 301 KAWAVARLSQRFPAEFAEVSKLVTDLTKVHTTECHGDLTECADDRAADLAKYICENODSI 360
DB 280 KAWAVARLSQRFPAEFAEVSKLVTDLTKVHTTECHGDLTECADDRAADLAKYICENODSI 339
QY 361 SSKLKECCERKPLKESRSTIAEVENDEMPADLPSTLAADPVEKDYCKRYAEKDYVPLGML 420
DB 340 SSKLKECCERKPLKESRSTIAEVENDEMPADLPSTLAADPVEKDYCKRYAEKDYVPLGML 399
QY 421 YEVARRRHDPYSVLLRLAKTYETTLKRCGAAADPHECYAKVPEEFKPLVEEPQNLIKON 480

DB 400 YEVARRRHDPYSVLLRLAKTYETTLKRCGAAADPHECYAKVPEEFKPLVEEPQNLIKON 459
QY 481 CELFEOGKYKFNALLVRYTKKVPPOVSTPTLVEVSRNLGKYSKCKKPKAKRMPCAED 540
DB 460 CELFEOGKYKFNALLVRYTKKVPPOVSTPTLVEVSRNLGKYSKCKKPKAKRMPCAED 519
QY 541 YLSVAVNQLCVLHEKTPVSDRVTKCTESLVNRRPFCFSALBVDYVYVPEFNAETFTFHA 600
DB 520 YLSVAVNQLCVLHEKTPVSDRVTKCTESLVNRRPFCFSALBVDYVYVPEFNAETFTFHA 579
QY 601 DICTLSEKERQIKQALVELYKHKPKATKQOLKAVMDPPAALVPEKCCADDKPKCPRAE 660
DB 580 DICTLSEKERQIKQALVELYKHKPKATKQOLKAVMDPPAALVPEKCCADDKPKCPRAE 639
QY 661 GKXUVAASQAALGL 674
DB 640 GKXUVAASQAALGL 657

RESULT 11

US-11-175-690-218
Sequence 218, Application US/11175690
Publication No. US20060014254A1
GENERAL INFORMATION:
APPLICANT: Haseltine et al.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PR605
CURRENT APPLICATION NUMBER: US/11/175,690
CURRENT FILING DATE: 2005-07-07
PRIOR APPLICATION NUMBER: PCT/US04/001369
PRIOR FILING DATE: 2004-01-20
PRIOR APPLICATION NUMBER: US 60/441,305
PRIOR FILING DATE: 2003-01-22
PRIOR APPLICATION NUMBER: US 60/453,201
PRIOR FILING DATE: 2003-03-11
PRIOR APPLICATION NUMBER: US 60/467,222
PRIOR FILING DATE: 2003-05-02
PRIOR APPLICATION NUMBER: US 60/472,816
PRIOR FILING DATE: 2003-05-23
PRIOR APPLICATION NUMBER: US 60/476,267
PRIOR FILING DATE: 2003-06-06
PRIOR APPLICATION NUMBER: US 60/505,172
PRIOR FILING DATE: 2003-09-24
PRIOR APPLICATION NUMBER: US 60/506,746
PRIOR FILING DATE: 2003-09-30
NUMBER OF SEQ ID NOS: 568
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 218
LENGTH: 652
TYPE: PRF
ORGANISM: Homo sapiens
US-11-175-690-218

Query Match 95.0%; Score 3391; DB 7; Length 652;
Best Local Similarity 96.0%; Pred. No. 2.2e-260;
Matches 647; Conservative 1; Mismatches 4; Indels 22; Gaps 2;

QY 1 MNTFYIPLFLISFVQGIERTHRGSLDKRKGEGTFTSDVSSYLEGQAARFIAMLVKGRH 60
DB 1 MNTFYIPLFLISFVQGIERTHRGSLDKRKGEGTFTSDVSSYLEGQAARFIAMLVKGR- 59
QY 61 GEGTFTSDVSSYLEGQAARFIAMLVKGRDARHKSSEVAHRFKDLGSENFKALVLIAPAOYL 120
DB 60 -----DARKSEVA-----DARKSEVAHRFKDLGSENFKALVLIAPAOYL 98
QY 121 QCCPFEDHVKLVNEVTEFAKTCVADBSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCC 180
DB 99 QCCPFEDHVKLVNEVTEFAKTCVADBSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCC 158
QY 181 AKQEPRENECFLOHKDNDNPNLPRLVREVDVWCTAAPHNDNETFLKXLYEYIARRHPYFYA 240
DB 159 AKQEPRENECFLOHKDNDNPNLPRLVREVDVWCTAAPHNDNETFLKXLYEYIARRHPYFYA 218

QY 241 PELLPFAKRYKAAFTFECGAAADKAAKCLLPKLDLDELDGKASSAKORLKACASIQKFGERRA 300
 DB 219 PELLFPAKRYKAAFTFECGAAADKAAKCLLPKLDLDELDGKASSAKORLKACASIQKFGERRA 278
 QY 301 KMAVAVARLSQRPPKAPFAVSKLVYDLYTKVHTTECCGGDILLEGADDRADLAKYICENODSI 360
 DB 279 KMAVAVARLSQRPPKAPFAVSKLVYDLYTKVHTTECCGGDILLEGADDRADLAKYICENODSI 338
 QY 361 SSKLKECCERPLLEKSHCIAEVENDMPADLPKLDLDELDGKASSAKORLKACASIQKFGERRA 420
 DB 339 SSKLKECCERPLLEKSHCIAEVENDMPADLPKLDLDELDGKASSAKORLKACASIQKFGERRA 398
 QY 421 YEYARRHPDYSVLLLRRLAKYETTLLEKCCAAADPHECYAKVDFEKPPLVEBPONLIKON 480
 DB 399 YEYARRHPDYSVLLLRRLAKYETTLLEKCCAAADPHECYAKVDFEKPPLVEBPONLIKON 458
 QY 481 CELFEOLEGEYKPNALLVRYTKKVPVSTPLVSVSRNLGKVGSKCCGHPBAKMPCAED 540
 DB 459 CELFEOLEGEYKPNALLVRYTKKVPVSTPLVSVSRNLGKVGSKCCGHPBAKMPCAED 518
 QY 541 YLSVAVNQLCVLHEKTPVSDRVTKCTTESLVNRRPCFSALAEVDETVYKPFNAETFFHA 600
 DB 519 YLSVAVNQLCVLHEKTPVSDRVTKCTTESLVNRRPCFSALAEVDETVYKPFNAETFFHA 578
 QY 601 DICTLSEKERQIKKQTLVAVLVKHKPKATKQKAVMDDPAFAVEKCCAKADKCTCPAE 660
 DB 579 DICTLSEKERQIKKQTLVAVLVKHKPKATKQKAVMDDPAFAVEKCCAKADKCTCPAE 638
 QY 661 GKRLVAASQAALGL 674
 DB 639 GKRLVAASQAALGL 652

RESULT 12

US-11-175-690-221
 ; Sequence 221, Application US/11175690
 ; Publication No. US20060014254A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Haseltine et al.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PF605
 ; CURRENT APPLICATION NUMBER: US/11/175, 690
 ; CURRENT FILING DATE: 2005-07-07
 ; PRIOR APPLICATION NUMBER: PCT/US04/001369
 ; PRIOR FILING DATE: 2004-01-20
 ; PRIOR APPLICATION NUMBER: US 60/441,305
 ; PRIOR FILING DATE: 2003-01-22
 ; PRIOR APPLICATION NUMBER: US 60/453,201
 ; PRIOR FILING DATE: 2003-03-11
 ; PRIOR APPLICATION NUMBER: US 60/467,222
 ; PRIOR FILING DATE: 2003-05-02
 ; PRIOR APPLICATION NUMBER: US 60/472,816
 ; PRIOR FILING DATE: 2003-05-23
 ; PRIOR APPLICATION NUMBER: US 60/476,267
 ; PRIOR FILING DATE: 2003-06-06
 ; PRIOR APPLICATION NUMBER: US 60/505,172
 ; PRIOR FILING DATE: 2003-09-24
 ; PRIOR APPLICATION NUMBER: PCT/US04/001369
 ; PRIOR FILING DATE: 2003-09-30
 ; NUMBER OF SEQ ID NOS: 368
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 221
 ; LENGTH: 659
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-11-175-690-221

Query Match 95.0%; Score 3390.5; DB 7; Length 659;
 Best Local Similarity 96.0%; Pred. No. 2,5e-260;
 Matches 648; Conservative 1; Mismatches 9; Indels 17; Gaps 2;

DB 1 KNIFYYFLFLSFGVGLBHTHRGSLDKRHSGETPTSDVSSYLEGQAAKEFIAMLVKGR 59
 QY 61 GEGTPTSDVSSYLEGQAAKEFIAMLVKGR-RDANKSEVAHRFKDLGEBNFKALVLLAFAYQ 119
 DB 60 -----DAKHSVVAHRFKDLGDNHSEVAHRFPDLDGEBNFKALVLLAFAYQ 104
 QY 120 LQQCPEDHVKLVNBTTEPAKTCVADDESANCDKSLHFLFGKLCVAVTARETYGEMADC 179
 DB 105 LQQCPEDHVKLVNBTTEPAKTCVADDESANCDKSLHFLFGKLCVAVTARETYGEMADC 164
 QY 180 CAKOBERNECFLOKDDNDPMLPRLVPRVDMCTAFHDNEETFLKCYLIEIARSHPPY 239
 DB 165 CAKOBERNECFLOKDDNDPMLPRLVPRVDMCTAFHDNEETFLKCYLIEIARSHPPY 224
 QY 240 ABELLFPAKRYKAAFTFECGAAADKAAKCLLPKLDLDELDGKASSAKORLKACASIQKFGERRA 299
 DB 225 ABELLFPAKRYKAAFTFECGAAADKAAKCLLPKLDLDELDGKASSAKORLKACASIQKFGERRA 284
 QY 300 PKAMAVARLSQRPPKAPFAVSKLVYDLYTKVHTTECCGGDILLEGADDRADLAKYICENODS 359
 DB 285 PKAMAVARLSQRPPKAPFAVSKLVYDLYTKVHTTECCGGDILLEGADDRADLAKYICENODS 344
 QY 360 ISSKLKECCERPLLEKSHCIAEVENDMPADLPKLDLDELDGKASSAKORLKACASIQKFGERRA 419
 DB 345 ISSKLKECCERPLLEKSHCIAEVENDMPADLPKLDLDELDGKASSAKORLKACASIQKFGERRA 404
 QY 420 LYEVARRHPDYSVLLLRRLAKYETTLLEKCCAAADPHECYAKVDFEKPPLVEBPONLIKQ 479
 DB 405 LYEVARRHPDYSVLLLRRLAKYETTLLEKCCAAADPHECYAKVDFEKPPLVEBPONLIKQ 464
 QY 480 NCELPEOULEGEYKPNALLVRYTKKVPVSTPLVSVSRNLGKVGSKCCGHPBAKMPCAE 539
 DB 465 NCELPEOULEGEYKPNALLVRYTKKVPVSTPLVSVSRNLGKVGSKCCGHPBAKMPCAE 524
 QY 540 DYSVAVNQLCVLHEKTPVSDRVTKCTTESLVNRRPCFSALAEVDETVYKPFNAETFFHA 599
 DB 525 DYSVAVNQLCVLHEKTPVSDRVTKCTTESLVNRRPCFSALAEVDETVYKPFNAETFFHA 584
 QY 600 ADICTLSEKERQIKKQTLVAVLVKHKPKATKQKAVMDDPAFAVEKCCAKADKCTCPAE 659
 DB 585 ADICTLSEKERQIKKQTLVAVLVKHKPKATKQKAVMDDPAFAVEKCCAKADKCTCPAE 644
 QY 660 EGKRLVAASQAALGL 674
 DB 645 EGKRLVAASQAALGL 659

RESULT 13

US-11-175-690-214
 ; Sequence 214, Application US/11175690
 ; Publication No. US20060014254A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Haseltine et al.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PF605
 ; CURRENT APPLICATION NUMBER: US/11/175, 690
 ; CURRENT FILING DATE: 2005-07-07
 ; PRIOR APPLICATION NUMBER: PCT/US04/001369
 ; PRIOR FILING DATE: 2004-01-20
 ; PRIOR APPLICATION NUMBER: US 60/441,305
 ; PRIOR FILING DATE: 2003-01-22
 ; PRIOR APPLICATION NUMBER: US 60/453,201
 ; PRIOR FILING DATE: 2003-03-11
 ; PRIOR APPLICATION NUMBER: US 60/467,222
 ; PRIOR FILING DATE: 2003-05-02
 ; PRIOR APPLICATION NUMBER: US 60/472,816
 ; PRIOR FILING DATE: 2003-05-23
 ; PRIOR APPLICATION NUMBER: US 60/476,267
 ; PRIOR FILING DATE: 2003-06-06
 ; PRIOR APPLICATION NUMBER: US 60/505,172
 ; PRIOR FILING DATE: 2003-09-24
 ; PRIOR APPLICATION NUMBER: US 60/506,746
 ; PRIOR FILING DATE: 2003-09-30

; NUMBER OF SEQ ID NOS: 568
 ; SOFTWARE: Patentin Ver. 2.0
 ; SEQ ID NO 214
 ; LENGTH: 648
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-11-175-690-214

Query Match 95.0%; Score 3389; DB 7; Length 648;
 Best Local Similarity 95.5%; Pred. No. 3,2e-260;
 Matches 644; Conservative 1; Mismatches 3; Indels 26; Gaps 1;

QY 1 MNIFYFLFLSFGVQGLSEHTHRGSLDKRKGSTFTSDVSSYLEGQAQKEFIAMLVKGRH 60
 ; 1 MNIFYFLFLSFGVQGLSEHTHRGSLDKRKGSTFTSDVSSYLEGQAQKEFIAMLVKGRD 60
 DB 61 GEGETSDVSSYLEGQAQKEFIAMLVKGRDAKSEVAHREPKDVGSENFKALVLIARAQYL 120
 ; 61 AH-----KDAHKSSEVAHREPKDVGSENFKALVLIARAQYL 94
 QY 121 QCCPFEDHVKLVNVEVTEPAKTCVADBSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCC 180
 ; 95 QCCPFEDHVKLVNVEVTEPAKTCVADBSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCC 154
 DB 181 AKQEPERNCEFLQHKDQDNPLPRLVPRVDMVCTAFHNDSEFTLKKYLYEIRARRHPFYFA 240
 ; 155 AKQEPERNCEFLQHKDQDNPLPRLVPRVDMVCTAFHNDSEFTLKKYLYEIRARRHPFYFA 214
 QY 241 PELLFPAKRYKAAFTTECCQAADKAACTLPKLDLDRDGGKASSAKORLKCASIQKFGERRAF 300
 ; 215 PELLFPAKRYKAAFTTECCQAADKAACTLPKLDLDRDGGKASSAKORLKCASIQKFGERRAF 274
 DB 301 KANAVALRSQRFPKAEFAVSKLVTDLTKVHTTECCGDI LLECADDRADLAKYICENODSI 360
 ; 275 KANAVALRSQRFPKAEFAVSKLVTDLTKVHTTECCGDI LLECADDRADLAKYICENODSI 334
 QY 361 SSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADPVESKDVCKNYABAKOVFLGMFL 420
 ; 335 SSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADPVESKDVCKNYABAKOVFLGMFL 394
 DB 421 YEYARRHPDYSVLLRLAKTYETTLKCCAAADPHECVAKVDFEFPKPLVEBPONLIKON 480
 ; 395 YEYARRHPDYSVLLRLAKTYETTLKCCAAADPHECVAKVDFEFPKPLVEBPONLIKON 454
 QY 481 CBLFQGLGEYKFNALLVRYTKKVPQVSTPTLVEVSRNLGKVGSKCKKHPBAKMPCAED 540
 ; 455 CBLFQGLGEYKFNALLVRYTKKVPQVSTPTLVEVSRNLGKVGSKCKKHPBAKMPCAED 514
 DB 541 YLSVLANOLCVLHEKTPVSDRVTKCTESLVMRRPFSALBVDETYVVPKFNARETTFPH 600
 ; 515 YLSVLANOLCVLHEKTPVSDRVTKCTESLVMRRPFSALBVDETYVVPKFNARETTFPH 574
 QY 601 DICTLSEKROIKKQALVELVYGHKPKATEQOLKAVMDPFAAFVEKCCCKADDKETCFABE 660
 ; 575 DICTLSEKROIKKQALVELVYGHKPKATEQOLKAVMDPFAAFVEKCCCKADDKETCFABE 634
 DB 661 GKQLVAASQAALGL 674
 ; 635 GKQLVAASQAALGL 648

RESULT 14
 US-11-175-690-224
 ; Sequence 224, Application US/11175690
 ; Publication No. US20060014254A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Haegeltine et al.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: P6605
 ; CURRENT APPLICATION NUMBER: US/11/175,690
 ; PRIORITY FILING DATE: 2005-07-07
 ; PRIORITY APPLICATION NUMBER: PCT/US04/001369
 ; PRIORITY FILING DATE: 2004-01-20

; PRIOR APPLICATION NUMBER: US 60/441,305
 ; PRIOR FILING DATE: 2003-01-22
 ; PRIOR APPLICATION NUMBER: US 60/453,201
 ; PRIOR FILING DATE: 2003-03-11
 ; PRIOR APPLICATION NUMBER: US 60/467,222
 ; PRIOR FILING DATE: 2003-05-02
 ; PRIOR APPLICATION NUMBER: US 60/472,816
 ; PRIOR FILING DATE: 2003-05-23
 ; PRIOR APPLICATION NUMBER: US 60/476,267
 ; PRIOR FILING DATE: 2003-06-06
 ; PRIOR APPLICATION NUMBER: US 60/505,172
 ; PRIOR FILING DATE: 2003-09-24
 ; PRIOR APPLICATION NUMBER: US 60/506,746
 ; PRIOR FILING DATE: 2003-09-30
 ; NUMBER OF SEQ ID NOS: 568
 ; SOFTWARE: Patentin Ver. 2.0
 ; SEQ ID NO 224
 ; LENGTH: 651
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-11-175-690-224

Query Match 94.9%; Score 3387.5; DB 7; Length 651;
 Best Local Similarity 95.8%; Pred. No. 4,2e-260;
 Matches 646; Conservative 1; Mismatches 4; Indels 23; Gaps 2;

QY 1 MNIFYFLFLSFGVQGLSEHTHRGSLDKRKGSTFTSDVSSYLEGQAQKEFIAMLVKGRH 60
 ; 1 MNIFYFLFLSFGVQGLSEHTHRGSLDKRKGSTFTSDVSSYLEGQAQKEFIAMLVKGRD 60
 DB 61 GEGETSDVSSYLEGQAQKEFIAMLVKGRDAKSEVAHREPKDVGSENFKALVLIARAQYL 120
 ; 61 AH-----KSEV-----DAHKSSEVAHREPKDVGSENFKALVLIARAQYL 97
 QY 121 QCCPFEDHVKLVNVEVTEPAKTCVADBSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCC 180
 ; 98 QCCPFEDHVKLVNVEVTEPAKTCVADBSAENCDKSLHTLFGDKLCTVAATLRETYGEMADCC 157
 DB 181 AKQEPERNCEFLQHKDQDNPLPRLVPRVDMVCTAFHNDSEFTLKKYLYEIRARRHPFYFA 240
 ; 158 AKQEPERNCEFLQHKDQDNPLPRLVPRVDMVCTAFHNDSEFTLKKYLYEIRARRHPFYFA 217
 QY 241 PELLFPAKRYKAAFTTECCQAADKAACTLPKLDLDRDGGKASSAKORLKCASIQKFGERRAF 300
 ; 218 PELLFPAKRYKAAFTTECCQAADKAACTLPKLDLDRDGGKASSAKORLKCASIQKFGERRAF 277
 DB 301 KANAVALRSQRFPKAEFAVSKLVTDLTKVHTTECCGDI LLECADDRADLAKYICENODSI 360
 ; 278 KANAVALRSQRFPKAEFAVSKLVTDLTKVHTTECCGDI LLECADDRADLAKYICENODSI 337
 QY 361 SSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADPVESKDVCKNYABAKOVFLGMFL 420
 ; 338 SSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADPVESKDVCKNYABAKOVFLGMFL 397
 DB 421 YEYARRHPDYSVLLRLAKTYETTLKCCAAADPHECVAKVDFEFPKPLVEBPONLIKON 480
 ; 398 YEYARRHPDYSVLLRLAKTYETTLKCCAAADPHECVAKVDFEFPKPLVEBPONLIKON 457
 QY 481 CBLFQGLGEYKFNALLVRYTKKVPQVSTPTLVEVSRNLGKVGSKCKKHPBAKMPCAED 540
 ; 458 CBLFQGLGEYKFNALLVRYTKKVPQVSTPTLVEVSRNLGKVGSKCKKHPBAKMPCAED 517
 DB 541 YLSVLANOLCVLHEKTPVSDRVTKCTESLVMRRPFSALBVDETYVVPKFNARETTFPH 600
 ; 518 YLSVLANOLCVLHEKTPVSDRVTKCTESLVMRRPFSALBVDETYVVPKFNARETTFPH 577
 QY 601 DICTLSEKROIKKQALVELVYGHKPKATEQOLKAVMDPFAAFVEKCCCKADDKETCFABE 660
 ; 578 DICTLSEKROIKKQALVELVYGHKPKATEQOLKAVMDPFAAFVEKCCCKADDKETCFABE 637
 DB 661 GKQLVAASQAALGL 674
 ; 638 GKQLVAASQAALGL 651

; APPLICANT: Haegeltine et al.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: P6605
 ; CURRENT APPLICATION NUMBER: US/11/175,690
 ; PRIORITY FILING DATE: 2005-07-07
 ; PRIORITY APPLICATION NUMBER: PCT/US04/001369
 ; PRIORITY FILING DATE: 2004-01-20

RESULT 15
 US-11-175-690-212
 ; Sequence 212, Application US/11175690
 ; Publication No. US20060014254A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Haseltine et al.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PP605
 ; CURRENT APPLICATION NUMBER: US/11/175,690
 ; CURRENT FILING DATE: 2005-07-07
 ; PRIOR APPLICATION NUMBER: PCT/US04/001369
 ; PRIOR FILING DATE: 2004-01-20
 ; PRIOR APPLICATION NUMBER: US 60/441,305
 ; PRIOR FILING DATE: 2003-01-22
 ; PRIOR APPLICATION NUMBER: US 60/453,201
 ; PRIOR FILING DATE: 2003-03-11
 ; PRIOR APPLICATION NUMBER: US 60/467,222
 ; PRIOR FILING DATE: 2003-05-02
 ; PRIOR APPLICATION NUMBER: US 60/472,816
 ; PRIOR FILING DATE: 2003-05-23
 ; PRIOR APPLICATION NUMBER: US 60/476,267
 ; PRIOR FILING DATE: 2003-06-06
 ; PRIOR APPLICATION NUMBER: US 60/505,172
 ; PRIOR FILING DATE: 2003-09-24
 ; PRIOR APPLICATION NUMBER: US 60/506,746
 ; PRIOR FILING DATE: 2003-09-30
 ; NUMBER OF SEQ ID NOS: 568
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 212
 ; LENGTH: 647
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-11-175-690-212

Query Match 94.9%; Score 3386.5; DB 7; Length 647;
 Best Local Similarity 95.5%; Pred. No. 5e-260;
 Matches 644; Conservative 0; Mismatches 3; Indels 27; Gaps 1;

QY 1 NNIFYYFLFLSTVQGLSEHTHRRGSLDKRHGEGTFTSDVSYLEGQAKEFLAMLVKGRH 60
 |||||||
 1 NNIFYYFLFLSTVQGLSEHTHRRGSLDKRHGEGTFTSDVSYLEGQAKEFLAMLVKGR- 59
 |||||||
 DB 61 GEGTFTSDVSYLEGQAKEFLAMLVKGRDAHKSEVAHRRFKDGGSENFKALVLIAPAQYL 120
 |||||||
 60 -----DADDAHKSEVAHRRFKDGGSENFKALVLIAPAQYL 93
 |||||||
 QY 121 QCCPFEDHVKLVNEVTEFAKTCVADBSAENCDKSIHTLFGDKLCTVAATLRETYGEMADCC 180
 |||||||
 94 QCCPFEDHVKLVNEVTEFAKTCVADBSAENCDKSIHTLFGDKLCTVAATLRETYGEMADCC 153
 |||||||
 QY 181 AQQEPRENNCFLOHKNDDNPNLPRLVREVDVWCTAFHNDSEPTLKKYLYEIAARRHPFYFA 240
 |||||||
 154 AQQEPRENNCFLOHKNDDNPNLPRLVREVDVWCTAFHNDSEPTLKKYLYEIAARRHPFYFA 213
 |||||||
 QY 241 PELLFPAKKRYKAFTFECOAADKAACILPKLDELDEGKAKSASKORLAKCASLQKFGERRAF 300
 |||||||
 214 PELLFPAKKRYKAFTFECOAADKAACILPKLDELDEGKAKSASKORLAKCASLQKFGERRAF 273
 |||||||
 QY 301 KAWAVARLSQRPFKAEFAVSVKLVTDLTKVHTFCCHGDLLECADDRADLAKYICENQDSI 360
 |||||||
 274 KAWAVARLSQRPFKAEFAVSVKLVTDLTKVHTFCCHGDLLECADDRADLAKYICENQDSI 333
 |||||||
 DB 361 SSKLKECCCKPILLESKHCTAEVNDSEMPADLPSLADPVESKDVCKNYAERKDVFLGMFL 420
 |||||||
 334 SSKLKECCCKPILLESKHCTAEVNDSEMPADLPSLADPVESKDVCKNYAERKDVFLGMFL 393
 |||||||
 QY 421 YEFARHHPYSVVLLRLAKTYETTLEKCCAAADPHKCYAKVDEPKPLVEBPQNLIKON 480
 |||||||
 394 YEFARHHPYSVVLLRLAKTYETTLEKCCAAADPHKCYAKVDEPKPLVEBPQNLIKON 453
 |||||||
 QY 481 CELFEQLEGEYKFGONALLVRYTKKVPQVSTPFLVSVSRNLGKVGSKCCKHPRKMPFCABD 540
 |||||||

DB 454 CELFEQLEGEYKFGONALLVRYTKKVPQVSTPFLVSVSRNLGKVGSKCCKHPRKMPFCABD 513
 |||||||
 QY 541 YLSVVIANQLCVLHEKTPVSDRVTKCCTESLVNRRPCFSALBEVDETYVPKEFNALETFTTHA 600
 |||||||
 514 YLSVVIANQLCVLHEKTPVSDRVTKCCTESLVNRRPCFSALBEVDETYVPKEFNALETFTTHA 573
 |||||||
 QY 601 DICTLSEKERQIKKQTPALVELVKEHKPKATKEQLKAVMDDFAAFVEKCCKADPKETCFPAE 660
 |||||||
 574 DICTLSEKERQIKKQTPALVELVKEHKPKATKEQLKAVMDDFAAFVEKCCKADPKETCFPAE 633
 |||||||
 QY 661 GKGLVAASQAALGL 674
 |||||||
 DB 634 GKGLVAASQAALGL 647
 |||||||

Search completed: April 19, 2006, 12:36:41
 Job time : 24.4986 secs

GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 19, 2006, 11:56:31 ; Search time 153.004 Seconds
(without alignment) 1852.232 Million cell updates/sec

Title: US-10-775-180-447_COPY_30_674
Sequence: 1 HGBGRTSVSSVLEBQAAK.....TCFAERBGRKLVAAASQALGL 645

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2443163 seqs, 439378781 residues
Total number of hits satisfying chosen parameters: 2443163

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_21:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*
9: geneseqp2005s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	3417	100.0	662	ADP16526	Adf16526 Human alb
2	3417	100.0	662	ADH21814	Adh21814 Human alb
3	3417	100.0	663	ADP16512	Adf16512 Human alb
4	3417	100.0	663	ADH21803	Adh21803 Human alb
5	3417	100.0	664	ADP16510	Adf16510 Human alb
6	3417	100.0	664	ADH21801	Adh21801 Human alb
7	3417	100.0	668	ADP16524	Adf16524 Human alb
8	3417	100.0	668	ADH21812	Adh21812 Human alb
9	3417	100.0	669	ADP16144	Adf16144 Human alb
10	3417	100.0	669	ADH21622	Adh21622 Human alb
11	3417	100.0	674	ADP16193	Adf16193 Human alb
12	3417	100.0	674	ADH21650	Adh21650 Human alb
13	3417	100.0	674	ADW45202	Adw45202 K. lactis
14	3417	100.0	730	ADP16525	Adf16525 Human alb
15	3417	100.0	730	ADH21813	Adh21813 Human alb
16	3417	100.0	915	ADW45204	Adw45204 K. lactis
17	3411	99.8	662	ADP16529	Adf16529 Human alb
18	3411	99.8	662	ADH21817	Adh21817 Human alb
19	3411	99.8	663	ADP16513	Adf16513 Human alb
20	3411	99.8	663	ADH21804	Adh21804 Human alb
21	3411	99.8	664	ADP16511	Adf16511 Human alb
22	3411	99.8	664	ADH21802	Adh21802 Human alb
23	3411	99.8	666	ADP16528	Adf16528 Human alb
24	3411	99.8	668	ADH21816	Adh21816 Human alb

25	3411	99.8	669	ADP16150	Adf16150 Human alb
26	3411	99.8	669	ADH21628	Adh21628 Human alb
27	3411	99.8	730	ADP16527	Adf16527 Human alb
28	3411	99.8	730	ADH21815	Adh21815 Human alb
29	3405	99.6	669	ADP16149	Adf16149 Human alb
30	3405	99.6	669	ADP16148	Adf16148 Human alb
31	3405	99.6	669	ADP16145	Adf16145 Human alb
32	3405	99.6	669	ADP16146	Adf16146 Human alb
33	3405	99.6	669	ADH21624	Adh21624 Human alb
34	3405	99.6	669	ADH21626	Adh21626 Human alb
35	3405	99.6	669	ADH21623	Adh21623 Human alb
36	3405	99.6	669	ADH21627	Adh21627 Human alb
37	3397	99.4	667	ADH21625	Adh21625 Human alb
38	3397	99.4	667	ADP16147	Adf16147 Human alb
39	3285	95.6	639	ADP15119	Adf15119 Human alb
40	3285	95.6	639	ADH21334	Adh21334 Human alb
41	3259	95.4	639	ADP15116	Adf15116 Human alb
42	3259	95.4	639	ADH21332	Adh21332 Human alb
43	3259	95.4	700	ADP16523	Adf16523 Human alb
44	3254	95.2	646	ADW45219	Adw45219 K. lactis
45	3253.5	95.2	647	ADW45208	Adw45208 K. lactis

ALIGNMENTS

RESULT 1	ADP16526	ADP16526 standard; protein; 662 AA.
AC	XX	ADP16526;
DT	12-FEB-2004	(first entry)
DE	Human albumin therapeutic fusion protein SegID1623.	
XX	albumin fusion protein; albumin activity; human serum albumin;	
KW	serum osmotic pressure; shelf-life; stability; antidiabetic;	
XX	gene therapy; diabetes mellitus; human.	
OS	Chimeric.	
OS	Homo sapiens.	
XX	WO2003060071-A2.	
XX	24-JUL-2003.	
XX	23-DEC-2002; 2002WC-US040891.	
XX	21-DEC-2001; 2001US-0341811P.	
PR	24-JAN-2002; 2002US-0350358P.	
PR	28-JAN-2002; 2002US-0351360P.	
PR	26-FEB-2002; 2002US-0359370P.	
PR	28-FEB-2002; 2002US-0360000P.	
PR	27-MAR-2002; 2002US-0367500P.	
PR	08-APR-2002; 2002US-0370227P.	
PR	10-MAY-2002; 2002US-0378950P.	
PR	24-MAY-2002; 2002US-0382617P.	
PR	28-MAY-2002; 2002US-0383123P.	
PR	05-JUN-2002; 2002US-0385708P.	
PR	10-JUL-2002; 2002US-0394625P.	
PR	24-JUL-2002; 2002US-0398008P.	
PR	09-AUG-2002; 2002US-0402131P.	
PR	13-AUG-2002; 2002US-0402708P.	
PR	18-SEP-2002; 2002US-0411355P.	
PR	18-SEP-2002; 2002US-0411426P.	
PR	02-OCT-2002; 2002US-0414984P.	
PR	11-OCT-2002; 2002US-0417611P.	
PR	23-OCT-2002; 2002US-0420246P.	
PR	05-NOV-2002; 2002US-0423623P.	
XX	(HUMA-) HUMAN GENOME SCI INC.	
PA	(DELZ) DELTA BIOTECHNOLOGY LTD.	

(PRIN-) PRINCIPIA PHARM CORP.
 Balance DJ, Turner AJ, Rosen CA, Haseltine WA;
 MPI: 2003-59851/7/56.
 New albumin fusion protein, useful for preparing a composition for treating diabetes mellitus.
 Example 4; SEQ ID NO 1623; 24pp; English.
 This invention relates to a novel albumin fusion protein having albumin or biological activity. Human serum albumin is responsible for a significant proportion of the osmotic pressure of serum and also functions as a carrier of endogenous and exogenous ligands. The fusion of albumin to a therapeutic protein may increase shelf-life and stability of the therapeutic protein. The albumin fusion protein of the invention may allow production of compositions with antidiabetic activity whilst the nucleotide sequence which encodes it may be useful for gene therapy. The albumin fusion protein is useful for preparing a composition for treating diabetes mellitus. The present sequence is the amino acid sequence of a novel full-length human albumin therapeutic fusion protein of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/publisheqct_sequences

Query Match 100.0%; Score 3417; DB 7; Length 662;
 Best Local Similarity 100.0%; Pred. No. 3.2e-283;
 Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Sequence 662 AA;
 1 HSEGFSTSDVSYLSEGOAKEFIAMLVKGRHGGRTSDVSYLSEGOAKEFIAMLVKGR 60
 18 HEGRTSDVSYLSEGOAKEFIAMLVKGRHGGRTSDVSYLSEGOAKEFIAMLVKGR 77
 61 DAHKSSEVAHRFKDLGSENFALVLAFAOYLQCCPEPDHVKLVNEVTEPAKTCVADESAB 120
 78 DAHKSSEVAHRFKDLGSENFALVLAFAOYLQCCPEPDHVKLVNEVTEPAKTCVADESAB 137
 121 NCDKSHHTLRGDKLCTVATLRFTYGGMADCCQKQEBRRBCFLQHDNDPMLPRLVRRPV 180
 138 NCKSHHTLRFGDKLCTVATLRFTYGGMADCCQKQEBRRBCFLQHDNDPMLPRLVRRPV 197
 181 DWMCSTAFHNDSEETFLKKYLYEYIARRHPPYAFAPPELLFFAKRYKAAFTCCOAAADKACALIP 240
 198 DWMCSTAFHNDSEETFLKKYLYEYIARRHPPYAFAPPELLFFAKRYKAAFTCCOAAADKACALIP 257
 241 KLDLRLDEGKASSAKQRLKCASTIQKTGERAFKAWAVARLSQRPKAEPAEAVSKLVTDLTK 300
 258 KLDLRLDEGKASSAKQRLKCASTIQKTGERAFKAWAVARLSQRPKAEPAEAVSKLVTDLTK 317
 301 VHTTECHGDLLEADDRADLAKYICENQPSISGKKECCCKPLKESHGICARVENDMPBA 360
 318 VHTTECHGDLLEADDRADLAKYICENQPSISGKKECCCKPLKESHGICARVENDMPBA 377
 361 DPSSLAADPVESSKDVCKNTAAEAKDVFAGMFLYAYARRHDPDYSVLLLRLLAKTYETTLK 420
 378 DPSSLAADPVESSKDVCKNTAAEAKDVFAGMFLYAYARRHDPDYSVLLLRLLAKTYETTLK 437
 421 CAAADPHCEYAKYFDFPKPLVEBPQNLIKQNCLEPQLGEGYKQNNALLVRYTKKVPQVST 480
 438 CAAADPHCEYAKYFDFPKPLVEBPQNLIKQNCLEPQLGEGYKQNNALLVRYTKKVPQVST 497
 481 PRLVRSKRLGKRGSKCKKPKAKRMPQADYLSVYLNQLCTIHERTPVSDRYTKKCTSS 540
 498 PRLVRSKRLGKRGSKCKKPKAKRMPQADYLSVYLNQLCTIHERTPVSDRYTKKCTSS 557
 541 LVNRRPCFSALVDEYTYVPPFAEFTFPHADICTISEKEROIKKQOTALVELVYKHKPKAT 600
 558 LVNRRPCFSALVDEYTYVPPFAEFTFPHADICTISEKEROIKKQOTALVELVYKHKPKAT 617
 601 KEQLKAVMDDFAAVFEKCKKADDKETCFABEGKQLVVAASQALGL 645

DB 618 KEQLKAVMDDFAAVFEKCKKADDKETCFABEGKQLVVAASQALGL 662
 RESULT 2
 ADH21814
 ID ADH21814 standard; protein; 662 AA.
 XX
 AC ADH21814;
 XX
 DT 11-MAR-2004 (first entry)
 XX
 DE Human albumin/GLP-1(7-36(A8G)) fusion protein, SEQ ID NO:611.
 XX
 XX Fusion protein; human serum albumin; HSA; therapeutic protein;
 KW shelf-life; in vitro biological activity; in vivo biological activity;
 KW metabolic disorder; endocrine disorder; diabetes; type 1; type 2;
 KW diabetes-related condition; hyperglycaemia; neural disorder; neuropathy;
 KW retinopathy; cardiovascular disorder; heart disease; renal disorder;
 KW obesity; glucose level maintenance; weight loss; antidiabetic; cardiact;
 KW anorectic; ophthalmological; gene therapy.
 XX
 OS Synthetic.
 OS Chimeric.
 OS Homo sapiens.
 PN WO2003059934-A2.
 XX
 PD 24-JUL-2003.
 XX
 PF 23-DEC-2002; 2002WO-US040892.
 XX
 PR 21-DEC-2001; 2001US-0341811P.
 PR 24-JAN-2002; 2002US-0350358P.
 PR 26-FEB-2002; 2002US-0359370P.
 PR 28-FEB-2002; 2002US-0360000P.
 PR 27-MAR-2002; 2002US-0367500P.
 PR 08-APR-2002; 2002US-0370227P.
 PR 10-MAY-2002; 2002US-0378950P.
 PR 24-JUL-2002; 2002US-0398008P.
 PR 09-AUG-2002; 2002US-0402131P.
 PR 13-AUG-2002; 2002US-0402708P.
 PR 18-SEP-2002; 2002US-0411355P.
 PR 02-OCT-2002; 2002US-0414984P.
 PR 11-OCT-2002; 2002US-0417611P.
 PR 23-OCT-2002; 2002US-0420246P.
 PR 05-NOV-2002; 2002US-0423623P.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 PI Rosen CA, Haseltine WA;
 XX
 DR MPI: 2003-598501/56.
 XX
 PT New albumin fusion protein, useful for preparing a composition for treating diabetes mellitus.
 XX
 PS Disclosure; SEQ ID NO 611; 1086pp; English.
 XX
 CC The invention relates to fusion proteins comprising human serum albumin (ADH21550) and a therapeutic polypeptide such as a therapeutic protein, antibody or peptide or their variants or fragments. The therapeutic protein may be fused to the N-terminus, the C-terminus or both termini of albumin via a linker. The albumin component of the fusion proteins CC prolongs the shelf-life and the in vitro and vivo biological activity of the proteins compared with those of the corresponding therapeutic CC proteins on their own. The invention also relates to nucleic acids CC encoding albumin fusion proteins, vectors and host cells comprising an CC albumin fusion protein nucleic acid, compositions and kits comprising an CC albumin fusion protein, the method of extending the shelf-life of a CC therapeutic protein by fusion with albumin, and the treatment of disease CC using an albumin fusion protein. The albumin fusion proteins may be used CC in the treatment of metabolic/endocrine disorders, diabetes and diabetes-

CC related conditions. Specifically the albumin fusion proteins may be used
 CC to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders
 CC (especially neuropathy), retinopathy, cardiovascular disorders
 CC (especially heart disease, renal disorders and obesity). The proteins may
 CC also be used in a method of maintaining a basal glucose level in a
 CC patient and in a method for losing weight. The present sequence is
 CC related to the invention.

XX Sequence 662 AA:

Query Match 100.0%; Score 3417; DB 7; Length 662;
 Best Local Similarity 100.0%; Pred. No. 3.2e-283; Indels 0; Gaps 0;
 Matches 645; Conservative 0; Mismatches 0; Idels 0; Gaps 0;

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QY 1 HGGGTFSDVSYLSEGOAAKEFIAMLVKGRHGGTFTSDVSYLSEGOAAKEFIAMLVKGR 60
DB HGGGTFSDVSYLSEGOAAKEFIAMLVKGRHGGTFTSDVSYLSEGOAAKEFIAMLVKGR 77
QY 61 DAHKSVAHRFKDLGSENFKALVLIAPAYLQQCPFDHVKLVNVEVTEPAKTCVADESAR 120
DB DAHKSVAHRFKDLGSENFKALVLIAPAYLQQCPFDHVKLVNVEVTEPAKTCVADESAR 137
QY 121 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPERNPCFLQHKDNDNPLRLVREPV 180
DB DAHKSVAHRFKDLGSENFKALVLIAPAYLQQCPFDHVKLVNVEVTEPAKTCVADESAR 197
QY 138 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPERNPCFLQHKDNDNPLRLVREPV 197
QY 181 DVNCTAFHNDNEFTFLKKYLYEIAARRHPYFAPBLLPFAKRYKAAFTFCCOADKAAKGLP 240
DB DVNCTAFHNDNEFTFLKKYLYEIAARRHPYFAPBLLPFAKRYKAAFTFCCOADKAAKGLP 257
QY 241 KDELADDEGKASSAKORLTKASLQKPEGEAFKAMAVARLSORPPKAFPAVSKLVVDLTK 300
DB KDELADDEGKASSAKORLTKASLQKPEGEAFKAMAVARLSORPPKAFPAVSKLVVDLTK 317
QY 258 KDELADDEGKASSAKORLTKASLQKPEGEAFKAMAVARLSORPPKAFPAVSKLVVDLTK 317
DB VHTTECGHDLLECGADRDADLAKYICENQDSISSKLEKCEKPLLEKSHCIABVENDEMPA 360
QY 301 VHTTECGHDLLECGADRDADLAKYICENQDSISSKLEKCEKPLLEKSHCIABVENDEMPA 360
DB VHTTECGHDLLECGADRDADLAKYICENQDSISSKLEKCEKPLLEKSHCIABVENDEMPA 377
QY 318 VHTTECGHDLLECGADRDADLAKYICENQDSISSKLEKCEKPLLEKSHCIABVENDEMPA 377
QY 361 DLPSLAADPVESKDVCKNVAEKAVFLGMFLYBYARHPDYSVVLLRLAKYETTLK 420
DB DLPSLAADPVESKDVCKNVAEKAVFLGMFLYBYARHPDYSVVLLRLAKYETTLK 437
QY 378 DLPSLAADPVESKDVCKNVAEKAVFLGMFLYBYARHPDYSVVLLRLAKYETTLK 437
QY 421 CAADAPHECYAKYVDEPKPLVBERPQNLKONCELFQDGLGKYPKONALLVYTTKKVPOVST 480
DB CAADAPHECYAKYVDEPKPLVBERPQNLKONCELFQDGLGKYPKONALLVYTTKKVPOVST 497
QY 438 CAADAPHECYAKYVDEPKPLVBERPQNLKONCELFQDGLGKYPKONALLVYTTKKVPOVST 497
QY 481 PTLVSRNIGKYGSSCKKPEAKRMPCAEDYLSVNLQCVLHEKTPVSDRVTKCTES 540
DB PTLVSRNIGKYGSSCKKPEAKRMPCAEDYLSVNLQCVLHEKTPVSDRVTKCTES 557
QY 498 PTLVSRNIGKYGSSCKKPEAKRMPCAEDYLSVNLQCVLHEKTPVSDRVTKCTES 557
QY 541 LVNRRPCFSALVEVDYVYVPEKFNARFTPHADICTTSEKSRQIKKQTALVELVYKHKPKAT 600
DB LVNRRPCFSALVEVDYVYVPEKFNARFTPHADICTTSEKSRQIKKQTALVELVYKHKPKAT 617
QY 558 LVNRRPCFSALVEVDYVYVPEKFNARFTPHADICTTSEKSRQIKKQTALVELVYKHKPKAT 617
QY 601 KEQIKAVMDPPAARAVKCKKADVETPTPAREGKQLVAASQAALGL 645
DB KEQIKAVMDPPAARAVKCKKADVETPTPAREGKQLVAASQAALGL 662
  
```

RESULT 3
 ADFI6512
 ID ADFI6512 standard; protein; 663 AA.

AC ADFI6512;
 XX 12-FEB-2004 (first entry)

DE Human albumin therapeutic fusion protein seqID1609.
 XX
 XX
 XX

KW albumin fusion protein; albumin activity; human serum albumin;
 KW serum osmotic pressure; shelf-life; stability; antidiabetic;
 KW gene therapy; diabetes mellitus; human.
 XX

OS Chimeric.
 OS Homo sapiens.

PN MO2003060071-A2.
 XX

XX 24-JUL-2003.
 XX

PF 23-DEC-2002; 2002WO-US040891.
 XX

PR 21-DEC-2001; 2001US-0341811P.
 PR 24-JAN-2002; 2002US-0350358P.
 PR 28-JAN-2002; 2002US-0351360P.
 PR 26-FEB-2002; 2002US-0359370P.
 PR 28-FEB-2002; 2002US-0360000P.
 PR 27-MAR-2002; 2002US-0367500P.
 PR 08-APR-2002; 2002US-0370227P.
 PR 10-MAY-2002; 2002US-0378850P.
 PR 24-MAY-2002; 2002US-0382617P.
 PR 28-MAY-2002; 2002US-0383123P.
 PR 05-JUN-2002; 2002US-0385708P.
 PR 10-JUL-2002; 2002US-0411425P.
 PR 24-JUL-2002; 2002US-0398008P.
 PR 09-AUG-2002; 2002US-0402131P.
 PR 13-AUG-2002; 2002US-0402708P.
 PR 18-SEP-2002; 2002US-0411355P.
 PR 18-SEP-2002; 2002US-0411426P.
 PR 02-OCT-2002; 2002US-0414984P.
 PR 11-OCT-2002; 2002US-0417611P.
 PR 23-OCT-2002; 2002US-0420246P.
 PR 05-NOV-2002; 2002US-0423623P.
 XX

XX (HUMA-) HUMAN GENOME SCI INC.
 PA (DELZ) DELTA BIOTECHNOLOGY LTD.
 PA (PRIN-) PRINCIPAL PHARM CORP.
 XX

PI Ballance DJ, Turner AJ, Rosen CA, Haseltine WA;
 PI WPI; 2003-598517/56.

DR New albumin fusion protein, useful for preparing a composition for

PT treating diabetes mellitus.
 XX

XX Example 4; SEQ ID NO 1609; 24pp; English.
 XX

CC This invention relates to a novel albumin fusion protein having albumin
 CC or biological activity. Human serum albumin is responsible for a
 CC significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion of
 CC albumin to a therapeutic protein may increase shelf-life and stability of
 CC the therapeutic protein. The albumin fusion protein of the invention may
 CC allow production of compositions with antidiabetic activity whilst the
 CC nucleotide sequence which encodes it may be useful for gene therapy. The
 CC albumin fusion protein is useful for preparing a composition for treating
 CC diabetes mellitus. The present sequence is the amino acid sequence of a
 CC novel full-length human albumin therapeutic fusion protein of the
 CC invention. Note: The sequence data for this patent did not form part of
 CC the printed specification, but was obtained in electronic format directly
 CC from Wipo at ftp.wipo.int/pub/publisheqct_sequences
 XX
 XX

Sequence 663 AA:
 Query Match 100.0%; Score 3417; DB 7; Length 663;
 Best Local Similarity 100.0%; Pred. No. 3.2e-283; Indels 0; Gaps 0;
 Matches 645; Conservative 0; Mismatches 0; Idels 0; Gaps 0;

QY 1 HGGGTFSDVSYLSEGOAAKEFIAMLVKGRHGGTFTSDVSYLSEGOAAKEFIAMLVKGR 60
 DB HGGGTFSDVSYLSEGOAAKEFIAMLVKGRHGGTFTSDVSYLSEGOAAKEFIAMLVKGR 78

QY 61 DAHKSVAHRFKDLGSENFKALVLIAPAYLQQCPFDHVKLVNVEVTEPAKTCVADESAR 120
 DB DAHKSVAHRFKDLGSENFKALVLIAPAYLQQCPFDHVKLVNVEVTEPAKTCVADESAR 138

QY 421 CAAADPHECYAKYFDEKPLVEBPONLIKONCELFEOLGGRKQNALLVYRYYTKKVPQVST 480
 DB 439 CAAADPHECYAKYFDEKPLVEBPONLIKONCELFEOLGGRKQNALLVYRYYTKKVPQVST 498
 QY 481 PTLVEVSRNIGKYGSKCKRPAKRMPCADYLSVVLNQLCVLHEKTPVSDRYTKCCTES 540
 DB 499 PTLVEVSRNIGKYGSKCKRPAKRMPCADYLSVVLNQLCVLHEKTPVSDRYTKCCTES 558
 QY 541 LVNRRPCFSALVEDETYVPEFNAETFTFHADICTLSEKERQIKKQALVELVYHKRKAT 600
 DB 559 LVNRRPCFSALVEDETYVPEFNAETFTFHADICTLSEKERQIKKQALVELVYHKRKAT 618
 QY 601 KEOLKAVMDDFAAFVEKCCKADDKETCFABEGSKLVVAASQALGL 645
 DB 619 KEOLKAVMDDFAAFVEKCCKADDKETCFABEGSKLVVAASQALGL 663

RESULT 5
 ADF16510 ID ADF16510 standard; protein: 664 AA.
 ADF16510: ADF16510:

AC 12-FEB-2004 (first entry)
 XX
 DE Human albumin therapeutic fusion protein SegID1607.
 XX
 KW albumin fusion protein; albumin activity; human serum albumin;
 KM serum osmotic pressure; shelf-life; stability; antidiabetic;
 KW gene therapy; diabetes mellitus; human.
 XX
 OS Chimeric.
 OS Homo sapiens.
 XX
 PN WC2003060071-A2.
 XX
 PD 24-JUL-2003.
 XX
 PF 23-DEC-2002; 2002WO-US040891.
 XX
 PR 21-DEC-2001; 2001US-0341811P.
 PR 24-JAN-2002; 2002US-0350358P.
 PR 28-JAN-2002; 2002US-0351360P.
 PR 26-FEB-2002; 2002US-0359370P.
 PR 28-FEB-2002; 2002US-0367000P.
 PR 27-MAR-2002; 2002US-0367500P.
 PR 08-APR-2002; 2002US-0370227P.
 PR 10-MAY-2002; 2002US-0378959P.
 PR 24-MAY-2002; 2002US-0382617P.
 PR 28-MAY-2002; 2002US-0383123P.
 PR 05-JUN-2002; 2002US-0385708P.
 PR 10-JUL-2002; 2002US-0394625P.
 PR 24-JUL-2002; 2002US-0398008P.
 PR 09-AUG-2002; 2002US-0402131P.
 PR 13-AUG-2002; 2002US-0402708P.
 PR 18-SEP-2002; 2002US-0411355P.
 PR 18-SEP-2002; 2002US-0411426P.
 PR 02-OCT-2002; 2002US-0414984P.
 PR 11-OCT-2002; 2002US-0417611P.
 PR 23-OCT-2002; 2002US-0420246P.
 PR 05-NOV-2002; 2002US-0423623P.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 PA (DELZ-) DELTA BIOTECHNOLOGY LTD.
 PA (PRIN-) PRINCIPAL PHARM CORP.
 PI Ballance DJ, Turner AJ, Rosen CA, Haseltine WA;
 XX
 XX MPI; 2003-596517/56.
 DR
 XX
 PT New albumin fusion protein, useful for preparing a composition for
 creating diabetes mellitus.

XX
 PS Example 4; SEQ ID NO 1607; 24pp; English.
 PS
 CC This invention relates to a novel albumin fusion protein having albumin
 CC or biological activity. Human serum albumin is responsible for a
 CC significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion of
 CC albumin to a therapeutic protein may increase shelf-life and stability of
 CC the therapeutic protein. The albumin fusion protein of the invention may
 CC allow production of compositions with antidiabetic activity whilst the
 CC nucleotide sequence which encodes it may be useful for gene therapy. The
 CC albumin fusion protein is useful for preparing a composition for treating
 CC diabetes mellitus. The present sequence is the amino acid sequence of a
 CC novel full-length human albumin therapeutic fusion protein of the
 CC invention. Note: The sequence data for this patent did not form part of
 CC the printed specification, but was obtained in electronic format directly
 CC from WIP0 at ftp.wipo.int/pub/publishedpac_sequences
 CC
 SQ Sequence 664 AA:

Query Match 100.0%; Score 3417; DB 7; Length 664;
 Best Local Similarity 100.0%; Pred. No. 3.2e-283;
 Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 1 HGEFTSDVSSYLEGQAAKEFLIAMLVGRHGEFTSDVSSYLEGQAAKEFLIAMLVGR 60
 20 HEGSTSDVSSYLEGQAAKEFLIAMLVGRHGEFTSDVSSYLEGQAAKEFLIAMLVGR 79
 QY 61 DAHKSVAHRFKDLGSENFKALVLIAPAOYLQCCPEPDHYKLVNRYTPRAKTCVADESNR 120
 DB 80 DAHKSVAHRFKDLGSENFKALVLIAPAOYLQCCPEPDHYKLVNRYTPRAKTCVADESNR 139
 QY 121 NCDKSLHTLFGDQLCTVATLRETYGEMADCCAKOBERNRNCFLOHDDPNLPRLVREPV 180
 DB 140 NCDKSLHTLFGDQLCTVATLRETYGEMADCCAKOBERNRNCFLOHDDPNLPRLVREPV 199
 QY 181 DVMCTAFHNDNEETFLKKYLYEIRARRHYFAPAPLILFFAKRYKAFTRECCOAPADKAA 240
 DB 200 DVMCTAFHNDNEETFLKKYLYEIRARRHYFAPAPLILFFAKRYKAFTRECCOAPADKAA 259
 QY 241 KDELRLDEGKASAKORLKCASIQKFGERAFAKAAVARLSORPPKAEPAVSGLVYDLDTK 300
 DB 260 KDELRLDEGKASAKORLKCASIQKFGERAFAKAAVARLSORPPKAEPAVSGLVYDLDTK 319
 QY 301 VHTCCCHGDLLECADRRADLAKYICENODSISSEKLEKCEKPLREKSHCIAEYNDMPA 360
 DB 320 VHTCCCHGDLLECADRRADLAKYICENODSISSEKLEKCEKPLREKSHCIAEYNDMPA 379
 QY 361 DLPSLAADPVESKDVCKNYVAEADVFLGMPLYEYARRHPDYSVLLLRLLAKTYETTLK 420
 DB 380 DLPSLAADPVESKDVCKNYVAEADVFLGMPLYEYARRHPDYSVLLLRLLAKTYETTLK 439
 QY 421 CAAADPHECYAKYFDEKPLVEBPONLIKONCELFEOLGGRKQNALLVYRYYTKKVPQVST 480
 DB 440 CAAADPHECYAKYFDEKPLVEBPONLIKONCELFEOLGGRKQNALLVYRYYTKKVPQVST 499
 QY 481 PTLVEVSRNIGKYGSKCKRPAKRMPCADYLSVVLNQLCVLHEKTPVSDRYTKCCTES 540
 DB 500 PTLVEVSRNIGKYGSKCKRPAKRMPCADYLSVVLNQLCVLHEKTPVSDRYTKCCTES 559
 QY 541 LVNRRPCFSALVEDETYVPEFNAETFTFHADICTLSEKERQIKKQALVELVYHKRKAT 600
 DB 560 LVNRRPCFSALVEDETYVPEFNAETFTFHADICTLSEKERQIKKQALVELVYHKRKAT 619
 QY 601 KEOLKAVMDDFAAFVEKCCKADDKETCFABEGSKLVVAASQALGL 645
 DB 620 KEOLKAVMDDFAAFVEKCCKADDKETCFABEGSKLVVAASQALGL 664
 RESULT 6
 ADH21801 ID ADH21801 standard; protein: 664 AA.

AC ADH21801;
 XX
 DT 11-MAR-2004 (first entry)
 XX
 XX Human albumin/GUP-1(7-36(A8G))x2 fusion protein, SEQ ID NO:598.
 DE
 XX Fusion protein; human serum albumin; HSA; therapeutic protein;
 KM shelf-life; in vitro biological activity; in vivo biological activity;
 KM metabolic disorder; endocrine disorder; diabetes; type 1; type 2;
 KM diabetes-related condition; hyperglycaemia; neural disorder; neuropathy;
 KM retinopathy; cardiovascular disorder; heart disease; renal disorder;
 KM obesity; glucose level maintenance; weight loss; antidiabetic; cardiant;
 KW anorectic; ophthalmological; gene therapy.
 XX
 OS Synthetic.
 OS Chimeric.
 OS Homo sapiens.
 XX
 XX MO2003059934-A2.
 XX
 PD 24-JUL-2003.
 XX
 PF 23-DEC-2002; 2002WO-US040892.
 XX
 XX 21-DEC-2001; 2001US-0341811P.
 PR 24-JAN-2002; 2002US-0350358P.
 PR 26-FEB-2002; 2002US-0359370P.
 PR 28-FEB-2002; 2002US-0360000P.
 PR 27-MAR-2002; 2002US-0367500P.
 PR 08-APR-2002; 2002US-0370227P.
 PR 10-MAY-2002; 2002US-0378950P.
 PR 24-JUL-2002; 2002US-0398008P.
 PR 09-AUG-2002; 2002US-0402131P.
 PR 13-AUG-2002; 2002US-0402788P.
 PR 18-SEP-2002; 2002US-0411355P.
 PR 02-OCT-2002; 2002US-0414984P.
 PR 11-OCT-2002; 2002US-0417611P.
 PR 23-OCT-2002; 2002US-0420246P.
 PR 05-NOV-2002; 2002US-0423623P.
 XX
 XX (HUMA-) HUMAN GENOME SCI INC.
 XX
 XX Rosen CA, Haseltine WA;
 PI WPI; 2003-598501/56.
 PT New albumin fusion protein, useful for preparing a composition for
 PT treating diabetes mellitus.
 XX
 PS Disclosure; SEQ ID NO 598; 1086pp; English.
 XX
 XX The invention relates to fusion proteins comprising human serum albumin
 CC (ADH21530) and a therapeutic polypeptide such as a therapeutic protein,
 CC antibody or peptide or their variants or fragments. The therapeutic
 CC protein may be fused to the N-terminus, the C-terminus or both termini of
 CC albumin via a linker. The albumin component of the fusion proteins
 CC prolongs the shelf-life and the in vitro and vivo biological activity of
 CC the proteins compared with those of the corresponding therapeutic
 CC proteins on their own. The invention also relates to nucleic acids
 CC encoding albumin fusion proteins, vectors and host cells comprising an
 CC albumin fusion protein nucleic acid, compositions and kits comprising an
 CC albumin fusion protein, the method of extending the shelf-life of a
 CC therapeutic protein by fusion with albumin, and the treatment of disease
 CC using an albumin fusion protein. The albumin fusion proteins may be used
 CC in the treatment of metabolic/endocrine disorders, diabetes and diabetes-
 CC related conditions. Specifically the albumin fusion proteins may be used
 CC to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders
 CC (especially neuropathy), retinopathy, cardiovascular disorders
 CC (especially heart disease, renal disorders and obesity. The proteins may
 CC also be used in a method of maintaining a basal glucose level in a
 CC patient and in a method for losing weight. The present sequence is
 CC related to the invention.

SQL Sequence 664 AA:
 Query Match 100.0%; Score 3417; DB 7; Length 664;
 Best Local Similarity 100.0%; Pred. No. 3,2e-283;
 Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HGRGFTSVSSSYLSEQAAKERFLAMLVKGRHGRGFTSVSSSYLSEQAAKERFLAMLVKGR 60
 |||
 DB 20 HGRGFTSVSSSYLSEQAAKERFLAMLVKGRHGRGFTSVSSSYLSEQAAKERFLAMLVKGR 79
 QY 61 DAHKSVARHPKDLGSENFKALVLAFAQYLQCCPEDEHVKLVNEVTEPAKTCVADESAR 120
 DB 80 DAHKSVARHPKDLGSENFKALVLAFAQYLQCCPEDEHVKLVNEVTEPAKTCVADESAR 139
 QY 121 NCDKSLHTLFGDKLCTVAATLRTTYGEMADCCAKQEBERNECFLOHKDNPDLRLVLRPEV 180
 |||
 DB 140 NCDKSLHTLFGDKLCTVAATLRTTYGEMADCCAKQEBERNECFLOHKDNPDLRLVLRPEV 199
 QY 181 DVKCTAFHNNERTFLKKIYLETARRRPPYYPAPBLFPARRYKAAFTCCQAADKAACTLP 240
 DB 200 DVKCTAFHNNERTFLKKIYLETARRRPPYYPAPBLFPARRYKAAFTCCQAADKAACTLP 259
 QY 241 KLDLELRDEKQASSAKORLKCASLQKFGERRAFKMAVAARLSORPPKAEPAVSKLVYDTRK 300
 |||
 DB 260 KLDLELRDEKQASSAKORLKCASLQKFGERRAFKMAVAARLSORPPKAEPAVSKLVYDTRK 319
 QY 301 VHTCCGDLLEBCADDRADLAKYICENODSISSKLKECCCKPLLEKSHGIAEVENDEMPA 360
 DB 320 VHTCCGDLLEBCADDRADLAKYICENODSISSKLKECCCKPLLEKSHGIAEVENDEMPA 379
 QY 361 DLPSLAADFVSEKDVCKNVAEAKDVLGMFLYERARRHDYSVLLLRKAKTYETLLEK 420
 DB 380 DLPSLAADFVSEKDVCKNVAEAKDVLGMFLYERARRHDYSVLLLRKAKTYETLLEK 439
 QY 421 CAADHBECKYAKVDEFPKLVBERPQWLKONCELFPEQLDEYKRONALLVRYTKVPOVST 480
 DB 440 CAADHBECKYAKVDEFPKLVBERPQWLKONCELFPEQLDEYKRONALLVRYTKVPOVST 499
 QY 481 PTLVSESRNLGKVGSKCCCKHPKAMPKMPKMPKMPKMPKMPKMPKMPKMPKMPKMPKMPK 540
 DB 500 PTLVSESRNLGKVGSKCCCKHPKAMPKMPKMPKMPKMPKMPKMPKMPKMPKMPKMPK 559
 QY 541 LVNRRPQPSALVEDEFTYVPEKRNPAETFTTHADICTISEKROIKKOTALVELVKHPEKAT 600
 DB 560 LVNRRPQPSALVEDEFTYVPEKRNPAETFTTHADICTISEKROIKKOTALVELVKHPEKAT 619
 QY 601 KBQLKAVMDPFAAFVEKCCCKADDKETCPAEEGKQLVAASQAALGL 645
 DB 620 KBQLKAVMDPFAAFVEKCCCKADDKETCPAEEGKQLVAASQAALGL 664

RESULT 7
 ADP16524
 ID ADP16524 standard; protein; 668 AA.
 AC
 XX ADF16524;
 XX
 DT 12-FEB-2004 (first entry)
 XX
 XX Human albumin therapeutic fusion protein SegID1621.
 KM albumin fusion protein; albumin activity; human serum albumin;
 KW serum osmotic pressure; shelf-life; stability; antidiabetic;
 KW gene therapy; diabetes mellitus; human.
 XX
 XX Chimeric.
 OS Homo sapiens.
 XX
 XX MO2003060071-A2.
 XX
 PD 24-JUL-2003.
 XX
 PF 23-DEC-2002; 2002WO-US040891.
 XX

XX 21-DEC-2001; 2001US-0341811P.
 PR 24-JAN-2002; 2002US-0350358P.
 PR 28-JAN-2002; 2002US-0351336P.
 PR 26-FEB-2002; 2002US-0359370P.
 PR 27-MAR-2002; 2002US-0367500P.
 PR 08-APR-2002; 2002US-0370227P.
 PR 10-MAY-2002; 2002US-0378950P.
 PR 24-MAY-2002; 2002US-0382617P.
 PR 28-MAY-2002; 2002US-0383123P.
 PR 05-JUN-2002; 2002US-0385708P.
 PR 10-JUL-2002; 2002US-0394625P.
 PR 24-AUG-2002; 2002US-0398008P.
 PR 09-SEP-2002; 2002US-0402131P.
 PR 13-AUG-2002; 2002US-0402708P.
 PR 18-SEP-2002; 2002US-0411355P.
 PR 18-SEP-2002; 2002US-0411426P.
 PR 02-OCT-2002; 2002US-0414984P.
 PR 11-OCT-2002; 2002US-0417611P.
 PR 23-OCT-2002; 2002US-0420246P.
 PR 05-NOV-2002; 2002US-0423623P.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 PA (DELZ) DELTA BIOTECHNOLOGY LTD.
 PA (PRIN-) PRINCIPIA PHARM CORP.
 PI Balance DJ, Turner AJ, Rosen CA, Haeelstine WA;
 XX WPI; 2003-598517/56.
 DR
 XX
 PT New albumin fusion protein, useful for preparing a composition for
 XX creating diabetes mellitus.
 PS Example 4; SEQ ID NO 1621; 24pp; English.
 XX
 CC This invention relates to a novel albumin fusion protein having albumin
 CC or biological activity. Human serum albumin is responsible for a
 CC significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion of
 CC albumin to a therapeutic protein may increase shelf-life and stability of
 CC the therapeutic protein. The albumin fusion protein of the invention may
 CC allow production of compositions with antidiabetic activity whilst the
 CC nucleotide sequence which encodes it may be useful for gene therapy. The
 CC albumin fusion protein is useful for preparing a composition for treating
 CC diabetes mellitus. The present sequence is the amino acid sequence of a
 CC novel full-length human albumin therapeutic fusion protein of the
 CC invention. Note: The sequence data for this patent did not form part of
 CC the printed specification, but was obtained in electronic format directly
 CC from WIPO at ftp.wipo.int/pub/publisthepct_sequences
 CC
 XX
 SQ Sequence 668 AA;

Query Match 100.0%; Score 3417; DB 7; Length 668;
 Best Local Similarity 100.0%; Pred. No. 3.3e-283;
 Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HGEGETSDVSSYLEGQAQKEFIAMLVKGRHGEGETSDVSSYLEGQAQKEFIAMLVKGR 60
 DB 24 HGEGETSDVSSYLEGQAQKEFIAMLVKGRHGEGETSDVSSYLEGQAQKEFIAMLVKGR 83
 QY 61 DAHSEVVAHRFDLGEENFKALVLIAPAOYLQCCPEFENHVKLVNVEVTFATTCVADSEAE 120
 DB 84 DAHSEVVAHRFDLGEENFKALVLIAPAOYLQCCPEFENHVKLVNVEVTFATTCVADSEAE 143
 QY 121 NODKSIHTLFGDKLCTVATLRETYGEMADCCAKQPERNECFLOHKDNPMLPRLVREBV 180
 DB 144 NODKSIHTLFGDKLCTVATLRETYGEMADCCAKQPERNECFLOHKDNPMLPRLVREBV 203
 QY 181 DVMCTAFPHDNBEETFLKKTLYEIAARRHPYFVABELLFPAKRYKAATFTECCQAADKAACLLP 240
 DB 204 DVMCTAFPHDNBEETFLKKTLYEIAARRHPYFVABELLFPAKRYKAATFTECCQAADKAACLLP 263

QY 241 KDELNDEGKSSAKORLKCASIQKFGERRAFKAMAVARLISQRPKAPPAVSVQLVYDITK 300
 DB 264 KDELNDEGKSSAKORLKCASIQKFGERRAFKAMAVARLISQRPKAPPAVSVQLVYDITK 323
 QY 301 VHTCCGHDLECGADDRADIAKYICENQDSISSKLRCCCKPFLBKSHCIAVYENDMPA 360
 DB 324 VHTCCGHDLECGADDRADIAKYICENQDSISSKLRCCCKPFLBKSHCIAVYENDMPA 383
 QY 361 DLPSLAADPVESKDVCKNVAEADVPLGMELYEYARRHPDYSVLLLRILAKTYETLLEK 420
 DB 384 DLPSLAADPVESKDVCKNVAEADVPLGMELYEYARRHPDYSVLLLRILAKTYETLLEK 443
 QY 421 CAAADPHCEYAKVPDEFKPLVBEPPQMLKONCELFBOLGKYKQNALVYRTTKVQVST 480
 DB 444 CAAADPHCEYAKVPDEFKPLVBEPPQMLKONCELFBOLGKYKQNALVYRTTKVQVST 503
 QY 481 PLYVEVSRNIGKYGSKCKKPKRPMCAADYLSVVLNQLCVLHEKTPVSDRYTKCTTES 540
 DB 504 PLYVEVSRNIGKYGSKCKKPKRPMCAADYLSVVLNQLCVLHEKTPVSDRYTKCTTES 563
 QY 541 LVNRRPCFSALVEDETYVPPKFNAAETTFPHADICTLSEKERQIKKOTALVELVGHKPKAT 600
 DB 564 LVNRRPCFSALVEDETYVPPKFNAAETTFPHADICTLSEKERQIKKOTALVELVGHKPKAT 623
 QY 601 KEQLKAVMDDFAAFVEKCKCAADKERTCFPAEGRKLVAAAGALGL 645
 DB 624 KEQLKAVMDDFAAFVEKCKCAADKERTCFPAEGRKLVAAAGALGL 668

RESULT 8
 ID ADH21812 standard; protein; 668 AA.
 AC ADH21812;
 DT 11-MAR-2004 (first entry)
 XX
 DE Human albumin/GPI-1(7-36(A8G))x2 fusion protein, SEQ ID NO:609.
 XX
 KW Fusion protein, human serum albumin; HSA; therapeutic protein;
 KW shell-life; in vitro biological activity; in vivo biological activity;
 KW metabolic disorder; endocrine disorder; diabetes; type 1; type 2;
 KW diabetes-related condition; hyperglycaemia; neural disorder; neuropathy;
 KW retinopathy; cardiovascular disorder; heart disease; renal disorder;
 KW obesity; glucose level maintenance; weight loss; antidiabetic; cardiac;
 KW anorectic; ophthalmological; gene therapy.
 XX
 OS Synthetic.
 OS Chimeric.
 OS Homo sapiens.
 XX
 PN WO2003059934-A2.
 PD 24-JUL-2003.
 PE 23-DEC-2002; 2002WO-US040892.
 XX
 XX 21-DEC-2001; 2001US-0341811P.
 PR 24-JAN-2002; 2002US-0350358P.
 PR 26-FEB-2002; 2002US-0359370P.
 PR 28-FEB-2002; 2002US-0360000P.
 PR 27-MAR-2002; 2002US-0367500P.
 PR 08-APR-2002; 2002US-0370227P.
 PR 10-MAY-2002; 2002US-0378950P.
 PR 24-MAY-2002; 2002US-0382617P.
 PR 28-MAY-2002; 2002US-0383123P.
 PR 09-AUG-2002; 2002US-0394625P.
 PR 13-AUG-2002; 2002US-0402131P.
 PR 18-SEP-2002; 2002US-0411355P.
 PR 18-SEP-2002; 2002US-0411426P.
 PR 02-OCT-2002; 2002US-0414984P.
 PR 11-OCT-2002; 2002US-0417611P.
 PR 23-OCT-2002; 2002US-0420246P.
 PR 05-NOV-2002; 2002US-0423623P.
 XX

PA (HUMA-) HUMAN GENOME SCI INC.
XX Rosen CA, Haseltine WA;
XX WPI; 2003-598501/56.

PT New albumin fusion protein, useful for preparing a composition for
PT treating diabetes mellitus.
XX Disclosure; SEQ ID NO 609; 1086pp; English.

CC The invention relates to fusion proteins comprising human serum albumin
CC (AldH153) and a therapeutic polypeptide such as a therapeutic protein,
CC antibody or peptide or their variants or fragments. The therapeutic
CC protein may be fused to the N-terminus, the C-terminus or both termini of
CC albumin via a linker. The albumin component of the fusion proteins
CC prolongs the shelf-life and the in vitro and vivo biological activity of
CC the proteins compared with those of the corresponding therapeutic
CC proteins on their own. The invention also relates to nucleic acids
CC encoding albumin fusion proteins, vectors and host cells comprising an
CC albumin fusion protein nucleic acid, compositions and kits comprising an
CC albumin fusion protein, the method of extending the shelf-life of a
CC therapeutic protein by fusion with albumin, and the treatment of disease
CC using an albumin fusion protein. The albumin fusion proteins may be used
CC in the treatment of metabolic/endocrine disorders, diabetes and diabetes-
CC related conditions. Specifically the albumin fusion proteins may be used
CC to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders
CC (especially neuropathy), retinopathy, cardiovascular disorders
CC (especially heart disease, renal disorders and obesity. The proteins may
CC also be used in a method of maintaining a basal glucose level in a
CC patient and in a method for losing weight. The present sequence is
CC related to the invention.

XX Sequence 668 AA;
SQ
Query Match 100.0%; Score 3417; DB 7; Length 668;
Best Local Similarity 100.0%; Pred. No. 3.3e-283;
Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HGEGETSDVSSYIEGQAAKPTAMLVKGGHGGSTPDSVSSYIEGQAAKPTAMLVKGR 60
DB 24 HGEGETSDVSSYIEGQAAKPTAMLVKGGHGGSTPDSVSSYIEGQAAKPTAMLVKGR 83
QY 61 DAKKSEVAHRFKDGGENPKALVLAQVLAQOCPPEPDHVKLVNVEYEPKATCVADSSAE 120
DB 84 DAKKSEVAHRFKDGGENPKALVLAQVLAQOCPPEPDHVKLVNVEYEPKATCVADSSAE 143
QY 121 NCDKSLHTLFGDKLCTVAATLREFTYGENADCCAKQEPERNCEFLQHKDNPMLPRLVREY 180
DB 144 NCDKSLHTLFGDKLCTVAATLREFTYGENADCCAKQEPERNCEFLQHKDNPMLPRLVREY 203
QY 181 DVNCTAFHNDNEFTPLKKYLYEIAARRHPYFPAPELFPFAKRYKAAFPTECCOAAADRAALTP 240
DB 204 DVNCTAFHNDNEFTPLKKYLYEIAARRHPYFPAPELFPFAKRYKAAFPTECCOAAADRAALTP 263
QY 241 KLDELREBGRASSAKORLKAASLQKFGEPAPKAAVAVARLRSORFPKAPAEVSKLVTDTLK 300
DB 264 KLDELREBGRASSAKORLKAASLQKFGEPAPKAAVAVARLRSORFPKAPAEVSKLVTDTLK 323
QY 301 VHTCECHGDLLECCADDRADLAKYICENODSISSKLKECCCEKPELLEKSHCIAVENDEMPA 360
DB 324 VHTCECHGDLLECCADDRADLAKYICENODSISSKLKECCCEKPELLEKSHCIAVENDEMPA 383
QY 361 DLPSLAADPVESSKDVCKNVAARAKVFLGMLFYEARRHDPYSVTLILRAKTYETTTAKC 420
DB 384 DLPSLAADPVESSKDVCKNVAARAKVFLGMLFYEARRHDPYSVTLILRAKTYETTTAKC 443
QY 421 CAAADPHRCYAKVDEBEPONLKKOCSLFBOLGEBYFONALIVRTKRVPOVST 480
DB 444 CAAADPHRCYAKVDEBEPONLKKOCSLFBOLGEBYFONALIVRTKRVPOVST 503
QY 481 PTLVEVSRNIGKVGSKCKHPPEAKRMPCAEDYLSVLANQLCVLHEKTPVSDRVTKCCTES 540

DB 504 PTLVEVSRNIGKVGSKCKHPPEAKRMPCAEDYLSVLANQLCVLHEKTPVSDRVTKCCTES 563
QY 541 LVNRRPCEFSALREVDYVYKPEFNAETFTFHADICTLSEKERQIKQOTALVELVKRKPAT 600
DB 564 LVNRRPCEFSALREVDYVYKPEFNAETFTFHADICTLSEKERQIKQOTALVELVKRKPAT 623
QY 601 KEQLKAVMDDFAAPVYKCKKADDKETCFPAEBGKLVAAASQAALGL 645
DB 624 KEQLKAVMDDFAAPVYKCKKADDKETCFPAEBGKLVAAASQAALGL 668

RESULT 9

ADP16144
ID ADP16144 standard; protein; 669 AA.
XX
AC ADP16144;
DT 12-FEB-2004 (first entry)
XX
DE Human albumin therapeutic fusion protein SeqID1231.
XX
KW albumin fusion protein; albumin activity; human serum albumin;
KW serum osmotic pressure; shelf-life; stability; antidiabetic;
KW gene therapy; diabetes mellitus; human.
XX
OS Chimeric.
OS Homo sapiens.
PN W02003060071-A2.
PD 24-JUL-2003.
XX
PF 23-DEC-2002; 2002WC-US040891.
XX

PR 21-DEC-2001; 2001US-0341811P.
PR 24-JAN-2002; 2002US-0350358P.
PR 28-JAN-2002; 2002US-0351360P.
PR 26-FEB-2002; 2002US-0359370P.
PR 28-FEB-2002; 2002US-0360000P.
PR 27-MAR-2002; 2002US-0367500P.
PR 08-APR-2002; 2002US-0370227P.
PR 10-MAY-2002; 2002US-0378950P.
PR 24-MAY-2002; 2002US-0382617P.
PR 28-MAY-2002; 2002US-0383123P.
PR 05-JUN-2002; 2002US-0385708P.
PR 10-JUL-2002; 2002US-0394625P.
PR 24-JUL-2002; 2002US-0398008P.
PR 09-AUG-2002; 2002US-0402131P.
PR 13-AUG-2002; 2002US-0402708P.
PR 18-SEP-2002; 2002US-0411355P.
PR 18-SEP-2002; 2002US-0411426P.
PR 02-OCT-2002; 2002US-0414984P.
PR 11-OCT-2002; 2002US-0417611P.
PR 23-OCT-2002; 2002US-0420246P.
PR 05-NOV-2002; 2002US-0423623P.
XX

PA (HUMA-) HUMAN GENOME SCI INC.
PA (DELTA) DELTA BIOTECHNOLOGY LTD.
PA (PRIN-) PRINCIPAL PHARM CORP.

PI Balance DJ, Turner AJ, Rosen CA, Haseltine WA;
XX WPI; 2003-598517/56.

PT New albumin fusion protein, useful for preparing a composition for
PT treating diabetes mellitus.
XX Example 4; SEQ ID NO 1231; 24pp; English.

CC This invention relates to a novel albumin fusion protein having albumin
CC or biological activity. Human serum albumin is responsible for a
CC significant proportion of the osmotic pressure of serum and also
CC functions as a carrier of endogenous and exogenous ligands. The fusion of

CC albumin to a therapeutic protein may increase shelf-life and stability of
 CC the therapeutic protein. The albumin fusion protein of the invention may
 CC allow production of compositions with antidiabetic activity whilst the
 CC nucleotide sequence which encodes it may be useful for gene therapy. The
 CC albumin fusion protein is useful for preparing a composition for treating
 CC diabetes mellitus. The present sequence is the amino acid sequence of a
 CC novel full-length human albumin therapeutic fusion protein of the
 CC invention. Note: The sequence data for this patent did not form part of
 CC the printed specification, but was obtained in electronic format directly
 CC from WIP0 at ftp.wip0.int/pub/publi/hdpct_sequences

Query Match 100.0%; Score 3417; DB 7; Length 669;
 Best Local Similarity 100.0%; Pred. No. 3,3e-283;
 Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	HGEGTFTSDVSYLLEGOAAKEFIAMLVKGRHGEGTFTSDVSYLLEGOAAKEFIAMLVKGR	60
DQ	25	HGEGTFTSDVSYLLEGOAAKEFIAMLVKGRHGEGTFTSDVSYLLEGOAAKEFIAMLVKGR	84
QY	61	DAKSEVAHRKDLGSENFALVIAFAOYLQOCPEEDHYKLVNEVTERPAKTCVADSSAE	120
DQ	85	DAKSEVAHRKDLGSENFALVIAFAOYLQOCPEEDHYKLVNEVTERPAKTCVADSSAE	144
QY	121	NCOKSLHTLFGDKLCTVAITLRETYGEMADCCAKOEPERNCEPLQHKDNDNLPRLVPEV	180
DQ	145	NCOKSLHTLFGDKLCTVAITLRETYGEMADCCAKOEPERNCEPLQHKDNDNLPRLVPEV	204
QY	181	DVNCSTAHNDNEETFLKLYLIEARRHRYFAVARDLFPFAKRYKAAPTECCOAAADKALTP	240
DQ	205	DVNCSTAHNDNEETFLKLYLIEARRHRYFAVARDLFPFAKRYKAAPTECCOAAADKALTP	264
QY	241	KLDELARDEGASAKQRIKQASLQKFGRRAPKMAVAARLSQRPKAPAVSKLVTDLTK	300
DQ	265	KLDELARDEGASAKQRIKQASLQKFGRRAPKMAVAARLSQRPKAPAVSKLVTDLTK	324
QY	301	VHTECGHDLLECGADDAADLAKYICENODSTISSKLAKECCEKPLLEKSHCIAVENDEMPA	360
DQ	325	VHTECGHDLLECGADDAADLAKYICENODSTISSKLAKECCEKPLLEKSHCIAVENDEMPA	384
QY	361	DLPSLAADFYVESKDVCQNVAYBAKDVFLGMLFLYERARRHPPYSVVLLRLAKTYETTLEK	420
DQ	385	DLPSLAADFYVESKDVCQNVAYBAKDVFLGMLFLYERARRHPPYSVVLLRLAKTYETTLEK	444
QY	421	CAAADPHCEYAKYFDFEKPVLVEEPQNLIKONCELFEOQGEYKFQNALLVYTKVPQVST	480
DQ	445	CAAADPHCEYAKYFDFEKPVLVEEPQNLIKONCELFEOQGEYKFQNALLVYTKVPQVST	504
QY	481	PTLVEVSRNIGKVGSSKCKRPAKRMBCADYLSVNLNOICVJHEKTPVSDRYWTKCCTES	540
DQ	505	PTLVEVSRNIGKVGSSKCKRPAKRMBCADYLSVNLNOICVJHEKTPVSDRYWTKCCTES	564
QY	541	LNNRPPCFSALEVDYVYVPEFNAETFTPHADICTLSEKEROIKKQATLVELVYKHKRAT	600
DQ	565	LNNRPPCFSALEVDYVYVPEFNAETFTPHADICTLSEKEROIKKQATLVELVYKHKRAT	624
QY	601	KEQDKAVMDDPAAFVETKCCAAADKRETGPAEBEGKLVVAASQAALGL 645	
DQ	625	KEQDKAVMDDPAAFVETKCCAAADKRETGPAEBEGKLVVAASQAALGL 669	

RESULT 10
 ADH21622
 ID ADH21622 standard; protein: 669 AA.
 XX ADH21622;
 AC ADH21622;
 XX 11-MAR-2004 (first entry)
 DT Human albumin/GMP-1(7-36(A8G)) fusion protein, SEQ ID NO:419.
 DE Human albumin; human serum albumin; HSA; therapeutic protein;
 XX

KW shelf-life; in vitro biological activity; in vivo biological activity;
 KW metabolic disorder; endocrine disorder; diabetes; type 1; type 2;
 KW diabetes-related condition; hyperglycaemia; neural disorder; neuropathy;
 KW retinopathy; cardiovascular disorder; heart disease; renal disorder;
 KW obesity; glucose level maintenance; weight loss; antidiabetic; cardiac;
 KW anorectic; ophthalmological; gene therapy.
 XX Synthetic.
 OS Chimeric.
 OS Homo sapiens.
 PN WC02003059934-A2.
 XX 24-JUL-2003.
 PD
 XX
 PF 23-DEC-2002; 2002WC-US040892.
 XX
 XX 21-DEC-2001; 2001US-0341811P.
 XX 24-JAN-2002; 2002US-0350358P.
 XX 26-FEB-2002; 2002US-0359370P.
 XX 28-FEB-2002; 2002US-0360000P.
 XX 27-MAR-2002; 2002US-0367500P.
 XX 08-APR-2002; 2002US-0370227P.
 XX 10-MAY-2002; 2002US-0378950P.
 XX 24-JUL-2002; 2002US-0398008P.
 XX 09-AUG-2002; 2002US-0402131P.
 XX 13-AUG-2002; 2002US-0402708P.
 XX 18-SEP-2002; 2002US-0411355P.
 XX 02-OCT-2002; 2002US-0414984P.
 XX 11-OCT-2002; 2002US-0417611P.
 XX 23-OCT-2002; 2002US-0420246P.
 XX 05-NOV-2002; 2002US-0423623P.

XX (HUMA-) HUMAN GENOME SCI INC.
 XX Rosen CA, Haseltine WA;
 PI WPI; 2003-598501/56.
 DR
 XX
 XX
 PT New albumin fusion protein, useful for preparing a composition for
 PT treating diabetes mellitus.
 PS
 PS Disclosure; SEQ ID NO 419; 1086bp; English.
 XX
 XX
 CC The invention relates to fusion proteins comprising human serum albumin
 CC (ADH21530) and a therapeutic polypeptide such as a therapeutic protein,
 CC antibody or peptide or their variants or fragments. The therapeutic
 CC protein may be fused to the N-terminus, the C-terminus or both termini of a
 CC albumin via a linker. The albumin component of the fusion proteins
 CC prolongs the shelf-life and the in vitro and vivo biological activity of
 CC the proteins compared with those of the corresponding therapeutic
 CC proteins on their own. The invention also relates to nucleic acids
 CC encoding albumin fusion proteins, vectors and host cells comprising an
 CC albumin fusion protein nucleic acid, compositions and kits comprising an
 CC albumin fusion protein, the method of extending the shelf-life of a
 CC therapeutic protein by fusion with albumin, and the treatment of disease
 CC using an albumin fusion protein. The albumin fusion proteins may be used
 CC in the treatment of metabolic/endocrine disorders, diabetes and diabetes-
 CC related conditions. Specifically the albumin fusion proteins may be used
 CC to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders
 CC (especially neuropathy), retinopathy, cardiovascular disorders
 CC (especially heart disease, renal disorders and obesity. The proteins may
 CC also be used in a method of maintaining a basal glucose level in a
 CC patient and in a method for losing weight. The present sequence is
 CC related to the invention.
 CC
 XX
 XX

Query Match 100.0%; Score 3417; DB 7; Length 669;
 Best Local Similarity 100.0%; Pred. No. 3,3e-283;
 Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 HGEGTFTSDVSYLLEGOAAKEFIAMLVKGRHGEGTFTSDVSYLLEGOAAKEFIAMLVKGR 60

RESULT 11

ADP16193

ID ADP16193 standard; protein: 674 AA.

AC ADF16193;

XX

DT 12-FEB-2004 (first entry)

DE Human albumin therapeutic fusion protein SegID1280.

XX

XX albumin fusion protein; albumin activity; human serum albumin;

XX serum osmotic pressure; shelf-life; stability; antidiabetic;

KW gene therapy; diabetes mellitus; human.

OS Chimeric.

OS Homo sapiens.

XX MO2003060071-A2.

PN

XX 24-JUL-2003.

PD

XX 23-DEC-2002; 2002WO-US040891.

PF

XX 21-DEC-2001; 2001US-0341811P.

PR 24-JAN-2002; 2002US-0350358P.

PR 28-JAN-2002; 2002US-0351360P.

PR 26-FEB-2002; 2002US-0359370P.

PR 28-FEB-2002; 2002US-0360000P.

PR 27-MAR-2002; 2002US-0367500P.

PR	08-APR-2002;	2002US-0370227P.
PR	10-MAY-2002;	2002US-0378950P.
PR	24-MAY-2002;	2002US-0386217P.
PR	28-MAY-2002;	2002US-0389123P.
PR	05-JUN-2002;	2002US-0385708P.
PR	10-JUL-2002;	2002US-0394625P.
PR	24-JUL-2002;	2002US-0398008P.
PR	09-AUG-2002;	2002US-0402131P.
PR	13-AUG-2002;	2002US-0402708P.
PR	18-SEP-2002;	2002US-0411355P.
PR	18-SEP-2002;	2002US-0411426P.
PR	02-OCT-2002;	2002US-0419844P.
PR	11-OCT-2002;	2002US-0417611P.
PR	23-OCT-2002;	2002US-0420246P.
PR	05-NOV-2002;	2002US-0423623P.
XX		
XX	(HUMA-) HUMAN GENOME SCI INC.	
PA	(DEL2) DELTA BIOTECHNOLOGY LTD.	
PA	(PRIN-) PRINCIPEDIA PHARM CORP.	
XX		
PI	Ballance DJ, Turner AJ, Rosen CA, Haseltine WA;	
DR	WPI; 2003-598517/56.	
XX		
PT	New albumin fusion protein, useful for preparing a composition for	
PT	treating diabetes mellitus.	
XX		
PS	Example 4; SEQ ID NO 1280; 24pp; English.	
XX		
CC	This invention relates to a novel albumin fusion protein having albumin	
CC	or biological activity. Human serum albumin is responsible for a	
CC	significant proportion of the osmotic pressure of serum and also	
CC	functions as a carrier of endogenous and exogenous ligands. The fusion of	
CC	albumin to a therapeutic protein may increase shelf-life and stability of	
CC	the therapeutic protein. The albumin fusion protein of the invention may	
CC	allow production of compositions with antidiabetic activity whilst the	
CC	mucoic acid sequence which encodes it may be useful for gene therapy. The	
CC	albumin fusion protein is useful for preparing a composition for treating	
CC	diabetes mellitus. The present sequence is the amino acid sequence of a	
CC	novel full-length human albumin therapeutic fusion protein of the	
CC	invention. Note: The sequence data for this patent did not form part of	
CC	the printed specification, but was obtained in electronic format directly	
CC	from WIPO at ftp.wipo.int/pub/publishshedpct_sequences	
XX		
SQ	Sequence 674 AA;	

Query Match 100.0%; Score 3417; DB 7; Length 674;

Best Local Similarity 100.0%; Fred. No. 3.3e-283; Indels 0; Gaps 0;

Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY	1	HGEGFTSDVSSYLEGQAAKEFTIAMIWKVGRHGGGTFTSDVSSYLEGQAAKEFTIAMIWKGR	60
DB	30	HGEGFTSDVSSYLEGQAAKEFTIAMIWKVGRHGGGTFTSDVSSYLEGQAAKEFTIAMIWKGR	89
OY	61	DAHKEVAHRFKDLDGSENFKALVLIAPAOYLQCCPEFDHYKLVNEVTEPAKTCVADDSAE	120
DB	90	DAHKEVAHRFKDLDGSENFKALVLIAPAOYLQCCPEFDHYKLVNEVTEPAKTCVADDSAE	149
OY	121	NCDSKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEBERNECFLOHKDNDPNLPLVREPV	180
DB	150	NCDSKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEBERNECFLOHKDNDPNLPLVREPV	209
OY	181	DVMCTAFHNDEETFLKKYLYEIAARRHYFYAPPELLFPKRYKAATFCCQAADKAACLLP	240
DB	210	DVMCTAFHNDEETFLKKYLYEIAARRHYFYAPPELLFPKRYKAATFCCQAADKAACLLP	269
OY	241	KLDDELDEGKASAKORLKCASLQKFGERAFAKAWAVARLSQRFPAKAPAVYSKLVTDLTK	300
DB	270	KLDDELDEGKASAKORLKCASLQKFGERAFAKAWAVARLSQRFPAKAPAVYSKLVTDLTK	329
OY	301	VHTECCGHDLLIECADDRADLAKYICENODSISSTLKKECCERPILEKSHCIAVENDEMPA	360
DB	330	VHTECCGHDLLIECADDRADLAKYICENODSISSTLKKECCERPILEKSHCIAVENDEMPA	389

```

QY DLPSLAADPVESKDVCKNVAEAKDVFGLGMPLEYEYARRRPPYVVLIRLAKTYETTLK 420
DB 390 DLPSLAADPVESKDVCKNVAEAKDVFGLGMPLEYEYARRRPPYVVLIRLAKTYETTLK 449
QY 421 CAADPHCEYAKVDFEFPKLVVEBPQNLIKONCELFQDLGEYKFNALLVRYTKVQVST 480
DB 450 CAADPHCEYAKVDFEFPKLVVEBPQNLIKONCELFQDLGEYKFNALLVRYTKVQVST 509
QY 481 PTLVEYSRNLGKVGSKCKCKRPAERMPCAEDYLSVVLNQLCVLHEKTPVSDRYTKCTES 540
DB 510 PTLVEYSRNLGKVGSKCKCKRPAERMPCAEDYLSVVLNQLCVLHEKTPVSDRYTKCTES 569
QY 541 LVNRRPCFSALVEDEYVYKPEFNALETFTPHADICTLSEKERQIKKQATALVELVYKPKPKAT 600
DB 570 LVNRRPCFSALVEDEYVYKPEFNALETFTPHADICTLSEKERQIKKQATALVELVYKPKPKAT 629
QY 601 KEOLKAVMDDFAAFVVEKCCKADDKETCFPAEBSGKLVVAASQAALGL 645
DB 630 KEOLKAVMDDFAAFVVEKCCKADDKETCFPAEBSGKLVVAASQAALGL 674

RESULT 12
ADH21650 ID ADH21650 standard; protein; 674 AA.
XX ADH21650;
AC 11-MAR-2004 (first entry)
XX
DT Human albumin/GPI-1(7-36(A8G))x2 fusion protein, SEQ ID NO:447.
DE
XX
KW Fusion protein; human serum albumin; HSA; therapeutic protein;
KW shelf-life; in vitro biological activity; in vivo biological activity;
KW metabolic disorder; endocrine disorder; diabetes; type 1; type 2;
KW diabetes-related condition; hyperglycaemia; neural disorder; neuropathy;
KW retinopathy; cardiovascular disorder; heart disease; renal disorder;
KW obesity; glucose level maintenance; weight loss; antidiabetic; cardiant;
KW anorectic; ophthalmological; gene therapy.
OS Synthetic.
OS Chimeric.
OS Homo sapiens.
XX
PN MO2003059934-A2.
XX
PD 24-JUL-2003.
XX
PF 23-DEC-2002; 2002W0-US040892.
XX
PR 21-DEC-2001; 2001US-0341811P.
PR 24-JAN-2002; 2002US-0350358P.
PR 26-FEB-2002; 2002US-0359370P.
PR 28-FEB-2002; 2002US-0360000P.
PR 27-MAR-2002; 2002US-0367500P.
PR 08-APR-2002; 2002US-0370227P.
PR 10-MAY-2002; 2002US-0378950P.
PR 24-JUL-2002; 2002US-0398008P.
PR 09-AUG-2002; 2002US-0402131P.
PR 13-AUG-2002; 2002US-0402708P.
PR 18-SEP-2002; 2002US-0411355P.
PR 02-OCT-2002; 2002US-0414984P.
PR 11-OCT-2002; 2002US-0417611P.
PR 23-OCT-2002; 2002US-0420246P.
PR 05-NOV-2002; 2002US-0423623P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Haseltine WA;
XX
DR WPI; 2003-598501/56.
XX
XX New albumin fusion protein, useful for preparing a composition for

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PT treating diabetes mellitus.
PS Disclosure; SEQ ID NO 447; 1086pp; English.
XX
CC The invention relates to fusion proteins comprising human serum albumin
CC (ADH21650) and a therapeutic polypeptide such as a therapeutic protein,
CC antibody or peptide or their variants or fragments. The therapeutic
CC protein may be fused to the N-terminus, the C-terminus or both termini of
CC albumin via a linker. The albumin component of the fusion proteins
CC prolongs the shelf-life and the in vitro and vivo biological activity of
CC the proteins compared with those of the corresponding therapeutic
CC proteins on their own. The invention also relates to nucleic acids
CC encoding albumin fusion proteins, vectors and host cells comprising an
CC albumin fusion protein nucleic acid, compositions and kits comprising an
CC albumin fusion protein, the method of extending the shelf-life of a
CC therapeutic protein by fusion with albumin, and the treatment of disease
CC using an albumin fusion protein. The albumin fusion proteins may be used
CC in the treatment of metabolic/endocrine disorders, diabetes and diabetes-
CC related conditions. Specifically the albumin fusion proteins may be used
CC to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders
CC (especially neuropathy), retinopathy, cardiovascular disorders
CC (especially heart disease, renal disorders and obesity. The proteins may
CC also be used in a method of maintaining a basal glucose level in a
CC patient and in a method for losing weight. The present sequence is
CC related to the invention.
XX
SQ Sequence 674 AA:
XX
Query Match 100.0%; Score 3417; DB 7; Length 674;
Best Local Similarity 100.0%; Pred. No. 3.3e-283;
Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 HEGSFTSYSSYTLREGQAKKFIAMLYKGRHGGFTSYSSYTLREGQAKKFIAMLYKGR 60
DB 30 HGGFTSYSSYTLREGQAKKFIAMLYKGRHGGFTSYSSYTLREGQAKKFIAMLYKGR 89
QY 61 DAHKSVAARFKDLGSENFKALVLAFAQYLQCCPEPDHVKLVNVEYTERPAKTCVADESAR 120
DB 90 DAHKSVAARFKDLGSENFKALVLAFAQYLQCCPEPDHVKLVNVEYTERPAKTCVADESAR 149
QY 121 NCDKSIHTLLFGDKLCTVAATLRETYGEMADCCAKQEPERNECFLOKQDNPMLPRLVPRVY 180
DB 150 NCDKSIHTLLFGDKLCTVAATLRETYGEMADCCAKQEPERNECFLOKQDNPMLPRLVPRVY 209
QY 181 DVMCTAFHNEETFLKKYLYEYARRRPPYFAPBLLFFARRYKRAFTECCQAADKAACTLP 240
DB 210 DVMCTAFHNEETFLKKYLYEYARRRPPYFAPBLLFFARRYKRAFTECCQAADKAACTLP 269
QY 241 KDELREDEGKASSAKQRLKCASTLQKFGERAFAKMAVAARLSQRPFAKAEFVSKLVYDTRK 300
DB 270 KDELREDEGKASSAKQRLKCASTLQKFGERAFAKMAVAARLSQRPFAKAEFVSKLVYDTRK 329
QY 301 VHTCCHGDLLECCADRADLAKYICENODSISSKLKECCERKPLLEKSHCIAYENDMDPA 360
DB 330 VHTCCHGDLLECCADRADLAKYICENODSISSKLKECCERKPLLEKSHCIAYENDMDPA 389
QY 361 DLPSLAADPVESKDVCKNVAEAKDVFGLGMPLEYEYARRRPPYVVLIRLAKTYETTLK 420
DB 390 DLPSLAADPVESKDVCKNVAEAKDVFGLGMPLEYEYARRRPPYVVLIRLAKTYETTLK 449
QY 421 CAADPHCEYAKVDFEFPKLVVEBPQNLIKONCELFQDLGEYKFNALLVRYTKVQVST 480
DB 450 CAADPHCEYAKVDFEFPKLVVEBPQNLIKONCELFQDLGEYKFNALLVRYTKVQVST 509
QY 481 PTLVEYSRNLGKVGSKCKCKRPAERMPCAEDYLSVVLNQLCVLHEKTPVSDRYTKCTES 540
DB 510 PTLVEYSRNLGKVGSKCKCKRPAERMPCAEDYLSVVLNQLCVLHEKTPVSDRYTKCTES 569
QY 541 LVNRRPCFSALVEDEYVYKPEFNALETFTPHADICTLSEKERQIKKQATALVELVYKPKPKAT 600
DB 570 LVNRRPCFSALVEDEYVYKPEFNALETFTPHADICTLSEKERQIKKQATALVELVYKPKPKAT 629
QY 601 KEOLKAVMDDFAAFVVEKCCKADDKETCFPAEBSGKLVVAASQAALGL 645

```

Db 630 KEOLKAVMDDPFAAFVEKCCKADDKETCFABEGKLVVAASQALGL 674

RESULT 13
ADM45202
ADM45202 standard; protein; 674 AA.

ADN45202;
07-APR-2005 (first entry)

K. Iactis killer toxin-GlP1-human serum albumin fusion protein - SEQ 206.
fusion protein; anti-HIV; gastrointestinal-gen.; antidiabetic; anorectic;
neurotrophic; cardiant; cytostatic; neuroprotective; immunosuppressive;
immune disorder; hematological disease; hyperproliferative disorder;
renal disease; cardiovascular disease; cardiovascular-gen.;
respiratory disorder; angiogenesis disorder; neurological disease;
wound healing; vulnery; endocrine disease; antimicrobial;
gynecological; infectious disease; gene therapy; toxin; HSA; albumin;
gastrointestinal disease; gene therapy; toxin; HSA; albumin;
glucagon-like peptide 1; GlP1.

Homo sapiens.
Kluyveromyces Iactis.
Chimeric.

WO2005003236-A2.
13-JAN-2005.

20-JAN-2004; 2004WO-US001369.
22-JAN-2003; 2003US-0441305P.

11-MAR-2003; 2003US-0453201P.
02-MAY-2003; 2003US-0467222P.

23-MAY-2003; 2003US-0472816P.
06-JUN-2003; 2003US-0476267P.

24-SEP-2003; 2003US-0505172P.
30-SEP-2003; 2003US-0506746P.

(HUMA-) HUMAN GENOME SCI INC.
Hasselatine WA, Rosen CA;

WPI; 2005-091786/10.
New albumin fusion protein for diagnosing, creating or preventing
diseases such as HIV/AIDS, diabetes, obesity, heart disease or immune
disorders comprises a therapeutic protein (e.g. CD4M3, GLP-2 or PACAP-
27) and an albumin.

Example 13; SEQ ID NO 206; 884pp; English.

The invention relates to a novel albumin fusion protein comprising a
therapeutic protein as listed in the specification in Table 1 and an
albumin comprising a sequence of SEQ ID NO: 1, or a fragment or variant
of SEQ ID NO: 1, where the fragment or variant has albumin activity and
where the albumin activity is the ability to prolong the shelf-life of
the therapeutic protein compared to the shelf-life of the therapeutic
protein in an unfused state. Human serum albumin (HSA, HA) is responsible
for a significant proportion of the osmotic pressure of serum and also
functions as a carrier of endogenous and exogenous ligands. The fusion
protein of the invention demonstrates anti-HIV, gastrointestinal-gen.,
antidiabetic, anorectic, cardiant and immunosuppressive activities. The
fusion protein may be useful for diagnosing, treating, preventing or
ameliorating diseases, such as immune disorders, cardiovascular disorders,
hyperproliferative disorders, renal disorders, cardiovascular disorders,
respiratory disorders, angiogenesis-related disorders, neurological
disorders, wound healing disorders and gastrointestinal disorders, possibly
with the use of gene therapy techniques. The current sequence is that of

CC the Kluyveromyces Iactis killer toxin-GlP1-human serum albumin fusion
protein - SEQ 206 of the invention.
XX Sequence 674 AA;

Query Match 100.0%; Score 3417; DB 9; Length 674;
Best Local Similarity 100.0%; Pred. No. 3,3e-283;
Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Table with 4 columns: ID, Similarity, Score, Length, DB, Gaps, Indels, Mismatches, Conservative. Rows include sequence alignment details for SEQ 206 and SEQ 14.

PD 24-JUL-2003.
 PF 23-DEC-2002; 2002WO-US040891.
 XX
 PR 21-DEC-2001; 2001US-0341811P.
 PR 24-JAN-2002; 2002US-0350358P.
 PR 28-JAN-2002; 2002US-0351360P.
 PR 26-FEB-2002; 2002US-0359370P.
 PR 28-FEB-2002; 2002US-036000P.
 PR 27-MAR-2002; 2002US-0367500P.
 PR 06-APR-2002; 2002US-0370227P.
 PR 10-MAY-2002; 2002US-0378950P.
 PR 24-MAY-2002; 2002US-0382617P.
 PR 28-MAY-2002; 2002US-0383123P.
 PR 05-JUN-2002; 2002US-0385708P.
 PR 10-JUL-2002; 2002US-0394625P.
 PR 24-JUL-2002; 2002US-0398008P.
 PR 09-AUG-2002; 2002US-0402131P.
 PR 13-AUG-2002; 2002US-0402708P.
 PR 18-SEP-2002; 2002US-0411355P.
 PR 18-SEP-2002; 2002US-0411426P.
 PR 02-OCT-2002; 2002US-0414984P.
 PR 11-OCT-2002; 2002US-0417611P.
 PR 23-OCT-2002; 2002US-0420246P.
 PR 05-NOV-2002; 2002US-0423623P.
 XX
 PA (HUMA-) HUMAN GENOME SGI INC.
 PA (DELZ) DELTA BIOTECHNOLOGY LTD.
 PA (PRIN-) PRINCIPAL PHARM CORP.
 XX
 PI Ballance DJ, Turner NJ, Rosen CA, Haseltine WA;
 XX
 DR WPI; 2003-598517/56.
 PT New albumin fusion protein, useful for preparing a composition for
 XX treating diabetes mellitus.
 XX
 PS Example 4; SEQ ID NO 1622; 24pp; English.
 XX
 CC This invention relates to a novel albumin fusion protein having albumin
 CC or biological activity. Human serum albumin is responsible for a
 CC significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion of
 CC albumin to a therapeutic protein may increase shelf-life and stability of
 CC the therapeutic protein. The albumin fusion protein of the invention may
 CC allow production of compositions with antidiabetic activity whilst the
 CC nucleotide sequence which encodes it may be useful for gene therapy. The
 CC albumin fusion protein is useful for preparing a composition for treating
 CC diabetes mellitus. The present sequence is the amino acid sequence of a
 CC novel full-length human albumin therapeutic fusion protein of the
 CC invention. Note: The sequence data for this patent did not form part of
 CC the printed specification, but was obtained in electronic format directly
 CC from WIFO at ftp.wifo.int/pub/publshdpc_sequences
 CC
 XX Sequence 730 AA;
 SQ

Query Match 100.0%; Score 3417; DB 7; Length 730;
 Best Local Similarity 100.0%; Pred. No. 3,7e-283; Indels 0; Gaps 0;
 Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HGEGETSDVSSYLEGQAAKEFLIAMIWKVGRHGEGETSDVSSYLEGQAAKEFLIAMIWKGR 60
 DB 86 HGEGETSDVSSYLEGQAAKEFLIAMIWKVGRHGEGETSDVSSYLEGQAAKEFLIAMIWKGR 145
 QY 61 DAHKSSEVAHRFKDLGSEENFALVLIAPAQYLQCCPFEDHVKLVNEVTEFAKTCVADESAR 120
 DB 146 DAHKSSEVAHRFKDLGSEENFALVLIAPAQYLQCCPFEDHVKLVNEVTEFAKTCVADESAR 205
 QY 121 NCKKSLHTLFGDKLCTVATLRETYGEMADCCAKOEPERNBCFLQHKDNDNLRPLVAPV 180
 DB 206 NCKKSLHTLFGDKLCTVATLRETYGEMADCCAKOEPERNBCFLQHKDNDNLRPLVAPV 265
 QY 181 DVNCTAFHNDNEETFLKYLVEIARRHPYFYAPPELLFPAKRYKAAFTFECQAAADKAACTLLP 240

DB 266 DVNCTAFHNDNEETFLKYLVEIARRHPYFYAPPELLFPAKRYKAAFTFECQAAADKAACTLLP 325
 QY 241 KLDELREDEGKASSAKORLTKCASLQKGEERAFKMAVARLSORPKAEFAVSKLVMDLTK 300
 DB 326 KLDELREDEGKASSAKORLTKCASLQKGEERAFKMAVARLSORPKAEFAVSKLVMDLTK 385
 QY 301 VHTTECHGDLLFEGCADDRAIDLAKYICENODSISSEKLEKCEKPKLLEKSHCIAVENDEMPA 360
 DB 386 VHTTECHGDLLFEGCADDRAIDLAKYICENODSISSEKLEKCEKPKLLEKSHCIAVENDEMPA 445
 QY 361 DLPSLAADPVESKDVCKNVAEADVFLKMFVLYYARRHPDYSVLLLRKATYETTLK 420
 DB 446 DLPSLAADPVESKDVCKNVAEADVFLKMFVLYYARRHPDYSVLLLRKATYETTLK 505
 QY 421 CAADDPHECYAKVDEKPLVBERPOLIKONCELFQOLGEGYKQNMLLVRYTKKVVQVST 480
 DB 506 CAADDPHECYAKVDEKPLVBERPOLIKONCELFQOLGEGYKQNMLLVRYTKKVVQVST 565
 QY 481 PTLVVESRNLGKVKSCCKPKPAKRMPCABDYLSVVLNQLCVLHEKTPVSDRVTKCCTES 540
 DB 566 PTLVVESRNLGKVKSCCKPKPAKRMPCABDYLSVVLNQLCVLHEKTPVSDRVTKCCTES 625
 QY 541 LVNRRPCFSALVEDETYVPEKFNABTFTFHADICTLSEKERQIKQOTALVELVYKHKPKAT 600
 DB 626 LVNRRPCFSALVEDETYVPEKFNABTFTFHADICTLSEKERQIKQOTALVELVYKHKPKAT 685
 QY 601 KEQLKAVMDPFAFVBEKCCADDKETCFABEGKQLVVAASQALGL 645
 DB 686 KEQLKAVMDPFAFVBEKCCADDKETCFABEGKQLVVAASQALGL 730

RESULT 15
 ADH21813
 ID ADH21813 standard; protein; 730 AA.
 XX
 AC ADH21813;
 XX
 DT 11-MAR-2004 (first entry)
 XX
 XX Human albumin/GSP-1(7-36(A8G)) fusion protein, SBQ ID NO:610.
 DE
 XX Fusion protein; human serum albumin; HSA; therapeutic protein;
 XX shelf-life; in vitro biological activity; in vivo biological activity;
 XX metabolic disorder; endocrine disorder; diabetes; type 1; type 2;
 XX diabetes-related condition; hyperglycaemia; neural disorder; neuropathy;
 XX retinopathy; cardiovascular disorder; heart disease; renal disorder;
 XX obesity; glucose level maintenance; weight loss; antidiabetic; cardiac;
 XX anorectic; ophthalmological; gene therapy.
 XX
 OS Synthetic.
 OS Calimeric.
 OS Homo sapiens.
 OS
 XX
 PN MO2003059934-A2.
 XX
 PD 24-JUL-2003.
 XX
 PF 23-DEC-2002; 2002WO-US040892.
 XX
 PR 21-DEC-2001; 2001US-0341811P.
 PR 24-JAN-2002; 2002US-0350358P.
 PR 26-FEB-2002; 2002US-0359370P.
 PR 28-FEB-2002; 2002US-036000P.
 PR 27-MAR-2002; 2002US-0367500P.
 PR 08-APR-2002; 2002US-0370227P.
 PR 10-MAY-2002; 2002US-0378950P.
 PR 24-JUL-2002; 2002US-0398008P.
 PR 09-AUG-2002; 2002US-0402131P.
 PR 13-AUG-2002; 2002US-0402708P.
 PR 18-SEP-2002; 2002US-0411355P.
 PR 02-OCT-2002; 2002US-0414984P.
 PR 11-OCT-2002; 2002US-0417611P.

23-OCT-2002; 2002US-0420246P.
 05-NOV-2002; 2002US-0423623P.
 (HUMA-) HUMAN GENOME SCI INC.
 Rosen CA, Haseltine WA;
 WPI; 2003-598501/56.
 New albumin fusion protein, useful for preparing a composition for treating diabetes mellitus.
 Disclosure: SEQ ID NO 610; 1086bp; English.
 The invention relates to fusion proteins comprising human serum albumin (ADH21530) and a therapeutic polypeptide such as a therapeutic protein, antibody or peptide or their variants or fragments. The therapeutic protein may be fused to the N-terminus, the C-terminus or both termini of albumin via a linker. The albumin component of the fusion proteins prolongs the shelf-life and the in vitro and vivo biological activity of the proteins compared with those of the corresponding therapeutic proteins on their own. The invention also relates to nucleic acids encoding albumin fusion proteins, vectors and host cells comprising an albumin fusion protein nucleic acid, compositions and kits comprising an albumin fusion protein, the method of extending the shelf-life of a therapeutic protein by fusion with albumin, and the treatment of disease using an albumin fusion protein. The albumin fusion proteins may be used in the treatment of metabolic/endocrine disorders, diabetes and diabetes-related conditions. Specifically the albumin fusion proteins may be used to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders (especially neuropathy), retinopathy, cardiovascular disorders (especially heart disease, renal disorders and obesity). The proteins may also be used in a method of maintaining a basal glucose level in a patient and in a method for losing weight. The present sequence is related to the invention.
 Sequence 730 AA:

Query Match 100.0%; Score 3417; DB 7; Length 730;
 Best Local Similarity 100.0%; Pct. No. 3.7e-283;
 Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 HEGGTSDVSSYLEGQAQAKKFIAMLVKGRHGGTSDVSSYLEGQAQAKKFIAMLVYGR 60
 HEGGTSDVSSYLEGQAQAKKFIAMLVKGRHGGTSDVSSYLEGQAQAKKFIAMLVYGR 60
 86 HEGGTSDVSSYLEGQAQAKKFIAMLVKGRHGGTSDVSSYLEGQAQAKKFIAMLVYGR 145
 DAHKEVAHRRPKDLGEEFKALVLIAPAOYIQQCPPEBHVKLNVNVTPEFAKTCVADSSAE 120
 DAHKEVAHRRPKDLGEEFKALVLIAPAOYIQQCPPEBHVKLNVNVTPEFAKTCVADSSAE 205
 146 DAHKEVAHRRPKDLGEEFKALVLIAPAOYIQQCPPEBHVKLNVNVTPEFAKTCVADSSAE 205
 NGDYSIAHTLFGDKLCTVATTAETYGEMADCCAKOPEPNECFLOHKDNPMLPRLVREP 180
 NGDYSIAHTLFGDKLCTVATTAETYGEMADCCAKOPEPNECFLOHKDNPMLPRLVREP 180
 206 NCDKSLHTLFGDKLCTVATTAETYGEMADCCAKOPEPNECFLOHKDNPMLPRLVREP 265
 NCDKSLHTLFGDKLCTVATTAETYGEMADCCAKOPEPNECFLOHKDNPMLPRLVREP 265
 181 DVMCTAFHNDNETFLAKKLYLVEIARRRPFYVAPPELLFPAKRYKAFTSCQAADKAACLTP 240
 DVMCTAFHNDNETFLAKKLYLVEIARRRPFYVAPPELLFPAKRYKAFTSCQAADKAACLTP 240
 266 DVMCTAFHNDNETFLAKKLYLVEIARRRPFYVAPPELLFPAKRYKAFTSCQAADKAACLTP 325
 DVMCTAFHNDNETFLAKKLYLVEIARRRPFYVAPPELLFPAKRYKAFTSCQAADKAACLTP 325
 241 KLDELRLDEGKASSAKORLKCASLQKFGERRAKAVARLSORFPAKRYKAFTSCQAADKAACLTP 300
 KLDELRLDEGKASSAKORLKCASLQKFGERRAKAVARLSORFPAKRYKAFTSCQAADKAACLTP 300
 326 KLDELRLDEGKASSAKORLKCASLQKFGERRAKAVARLSORFPAKRYKAFTSCQAADKAACLTP 385
 KLDELRLDEGKASSAKORLKCASLQKFGERRAKAVARLSORFPAKRYKAFTSCQAADKAACLTP 385
 301 VHTCCGHDLLFCADPRADIAKYIGENODTSSKLEKCEKPLKESHCIATVENDEMPA 360
 VHTCCGHDLLFCADPRADIAKYIGENODTSSKLEKCEKPLKESHCIATVENDEMPA 360
 386 VHTCCGHDLLFCADPRADIAKYIGENODTSSKLEKCEKPLKESHCIATVENDEMPA 445
 VHTCCGHDLLFCADPRADIAKYIGENODTSSKLEKCEKPLKESHCIATVENDEMPA 445
 361 DLPRLAADPVEESKDYCKNVAEAKADVFLGMLFVEYARRHHDYSVVILLRIAKTYETTLK 420
 DLPRLAADPVEESKDYCKNVAEAKADVFLGMLFVEYARRHHDYSVVILLRIAKTYETTLK 420
 446 DLPRLAADPVEESKDYCKNVAEAKADVFLGMLFVEYARRHHDYSVVILLRIAKTYETTLK 505
 DLPRLAADPVEESKDYCKNVAEAKADVFLGMLFVEYARRHHDYSVVILLRIAKTYETTLK 505
 421 CAADPHECYAKVDFEFLVVEPQNLIKQNCLEPQGLGEYKQNALIVRYTKVPOVST 480
 CAADPHECYAKVDFEFLVVEPQNLIKQNCLEPQGLGEYKQNALIVRYTKVPOVST 480
 506 CAADPHECYAKVDFEFLVVEPQNLIKQNCLEPQGLGEYKQNALIVRYTKVPOVST 565
 CAADPHECYAKVDFEFLVVEPQNLIKQNCLEPQGLGEYKQNALIVRYTKVPOVST 565

481 PTLVEASRLGKVGSKCCKHPBEAKMPCABEDYLSVVLNQLCVLHCKTPVSDRVTKCTTES 540
 PTLVEASRLGKVGSKCCKHPBEAKMPCABEDYLSVVLNQLCVLHCKTPVSDRVTKCTTES 540
 566 PTLVEASRLGKVGSKCCKHPBEAKMPCABEDYLSVVLNQLCVLHCKTPVSDRVTKCTTES 625
 PTLVEASRLGKVGSKCCKHPBEAKMPCABEDYLSVVLNQLCVLHCKTPVSDRVTKCTTES 625
 541 LVNRRPCFSALEVDETYVYKFNAAETFTFHADICTLSKEREQIKKQPLVAVLKHKPKAT 600
 LVNRRPCFSALEVDETYVYKFNAAETFTFHADICTLSKEREQIKKQPLVAVLKHKPKAT 600
 626 LVNRRPCFSALEVDETYVYKFNAAETFTFHADICTLSKEREQIKKQPLVAVLKHKPKAT 685
 LVNRRPCFSALEVDETYVYKFNAAETFTFHADICTLSKEREQIKKQPLVAVLKHKPKAT 685
 601 KEQLKAVNDDPFAAFVFKCGKADDKETCFABEGSKLVVAASQALGL 645
 KEQLKAVNDDPFAAFVFKCGKADDKETCFABEGSKLVVAASQALGL 645
 686 KEQLKAVNDDPFAAFVFKCGKADDKETCFABEGSKLVVAASQALGL 730
 KEQLKAVNDDPFAAFVFKCGKADDKETCFABEGSKLVVAASQALGL 730

Search completed: April 19, 2006, 12:02:33
 Job time : 155.004 secs

GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 19, 2006, 12:02:52 ; Search time 29.3182 Seconds
 (without alignments)
 2116.769 Million cell updates/sec

Title: US-10-775-180-447_COPY_30_674

Perfect score: 3417
 Sequence: 1 HGEGRFTSDVSSVSLRSGQAK.....TGPAREGKTLVAASQALGL 645

Scoring table: BLOSUM62
 Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
 Maximum Match 100%
 Listing first 45 summaries

Database : PIR 80:**
 1: Dirl:**
 2: Pirt:**
 3: Pir3:**
 4: Pir4:**

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysts of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3108	91.0	609	1 ABH0S	serum albumin prec
2	2947	86.2	600	2 A47391	serum albumin prec
3	2627	76.9	608	2 S57632	serum albumin prec
4	2481.5	72.6	607	1 ABH0S	serum albumin prec
5	2451.5	71.7	607	1 ABH0S	serum albumin prec
6	2437.5	71.3	607	1 ABH0S	serum albumin prec
7	2431	71.1	608	1 ABRTS	serum albumin prec
8	2416.5	70.7	605	1 ABPGS	serum albumin prec
9	2387.5	69.9	609	2 JCS838	albumin - Mongolia
10	1861	54.5	453	2 A05139	serum albumin - mo
11	1562	45.7	615	1 ABCBS	serum albumin prec
12	1260.5	36.9	609	2 JC4258	alpha-fetoprotein
13	1256.5	36.8	609	2 PPHU	alpha-fetoprotein
14	1249.5	35.6	609	1 FPGO	alpha-fetoprotein
15	1207.5	35.3	607	1 ABXL72	74k albumin precu
16	1181.5	34.6	265	2 I46986	albumin - dog (fra
17	1175.5	34.4	608	1 ABXL68	68k serum albumin
18	1084	31.7	605	1 FPM5	alpha-fetoprotein
19	1067	31.2	611	1 FPRT	alpha-fetoprotein
20	1055	30.9	599	1 A54906	atamin precursor -
21	932.5	27.3	608	2 A53195	atamin precursor -
22	930	27.2	614	2 A59517	serum albumin prec
23	751.5	22.0	608	1 ABONS1	serum albumin 1 pr
24	746.5	21.8	608	1 ABONS2	serum albumin 2 pr
25	699	20.5	382	2 A37253	serum albumin - bu
26	440.5	12.9	1423	1 S27941	serum albumin - se
27	401	11.7	474	1 VYHDD	vitamin D-binding
28	400	11.7	476	1 VYRTD	vitamin D-binding
29	387	11.3	472	1 A35327	vitamin D-binding

30	227.5	6.7	180	1 GCRT	glucagon precursor
31	227.5	6.7	180	2 A57294	glucagon precursor
32	225.5	6.6	180	1 GCBO	glucagon precursor
33	225.5	6.6	180	1 GCHY	glucagon precursor
34	225.5	6.6	180	1 GCHY	glucagon precursor
35	224.5	6.6	180	1 GCGP	glucagon precursor
36	222.5	6.5	158	1 GCPG	glucagon precursor
37	214.5	6.3	180	1 GCRTDU	glucagon precursor
38	213	6.2	206	2 I51301	proglucon - chic
39	209	6.1	101	1 GCRGB	glucagon precursor
40	204.5	6.0	151	1 GCCH	glucagon precursor
41	190.5	5.6	122	1 GCFP2	glucagon 2 precursor
42	188.5	5.5	63	1 GCIDC	glucagon precursor
43	188.5	5.5	178	2 I51058	glucagon 1 precursor
44	188	5.5	72	1 GCGXA	glucagon precursor
45	184	5.4	1819	2 A71928	cag island protein

ALIGNMENTS

RESULT 1
 ABH0S
 serum albumin precursor [validated] - human
 N:Alternate names: preproalbumin
 N:Contains: Homo sapiens (man)
 C:Species: Homo sapiens (man)
 C>Date: 29-Jul-1981 #sequence revision 31-Jan-1997 #ext change 09-Jul-2004
 C:Accession: A93743; A93936; I39427; I59286; I59313; G01747; S55314; A91420; S06422; S3
 R:Lawl, R.M.; Adelman, J.; Book, S.C.; Franke, A.E.; Houck, C.M.; Najarian, R.C.; Seebu
 Nucleic Acids Res. 9, 6103-6114, 1981
 A:Title: The sequence of human serum albumin cDNA and its expression in Escherichia coli
 A:Reference number: A93743; MWID:82081882; PMID:6171778
 A:Accession: A93743
 A:Molecule type: mRNA
 A:Residues: 1-419, 'K', 421-609 <LAW>
 A:Cross-references: UNIPROT:P02768; UNIPARC:UPI00002CE3A; EMBL:V00495; GB:U00078; GB:U
 R:Dugalczyk, A.; Law, S.W.; Dennison, O.E.
 Proc Natl. Acad. Sci. U.S.A. 79, 71-75, 1982
 A:Title: Nucleotide sequence and the encoded amino acids of human serum albumin mRNA.
 A:Reference number: A93936; MWID:82105994; PMID:6275391
 A:Accession: A93936
 A:Molecule type: mRNA
 A:Residues: 1-120, 'G', 122-609 <DUG>
 A:Cross-references: UNIPARC:UPI0000156BB8; EMBL:V00494; NID:G28589; PIDN:CAA23753.1; PI
 R:Drano, Y.; Watanabe, K.; Sakai, M.; Tameoki, T.
 J. Biol. Chem. 261, 3244-3251, 1986
 A:Title: The human albumin gene. Characterization of the 5' and 3' flanking regions and
 A:Reference number: I39427; MWID:86140099; PMID:2419329
 A:Accession: I39427
 A:Status: translation not shown
 A:Status: translation not shown
 A:Molecule type: DNA
 A:Residues: 1-26 <URA>
 A:Cross-references: UNIPARC:UPI00002BDF; GB:M13075; NID:G178330; PIDN:AAA51688.1; PID
 R:Watkins, S.; Madison, J.; Galliano, M.; Minichiochi, L.; Putnam, F.W.
 Proc. Natl. Acad. Sci. U.S.A. 91, 2275-2279, 1994
 A:Title: A nucleotide insertion and frameshift cause analbuminemia in an Italian family
 A:Reference number: I59286; MWID:94181575; PMID:8134387
 A:Accession: I59286
 A:Status: translated from GB/EMBL/DDBJ
 A:Molecule type: DNA
 A:Residues: 282-290, 'KSRFDLQ' <MAT>
 A:Cross-references: UNIPARC:UPI000011F7AF; GB:S69192; NID:G546032; PIDN:AAB30282.1; PID
 A:Note: this frame-shift variant, designated albumin Roma, leads to analbuminemia
 R:Madison, J.; Galliano, M.; Watkins, S.; Minichiochi, L.; Porta, F.; Rossi, A.; Putnam,
 Proc. Natl. Acad. Sci. U.S.A. 91, 6476-6480, 1994
 A:Title: Genetic variants of human serum albumin in Italy: point mutants and a carboxyl-
 A:Reference number: I59313; MWID:94294404; PMID:8022807
 A:Accession: I59313
 A:Status: translated from GB/EMBL/DDBJ
 A:Molecule type: DNA
 A:Residues: 589-590, 'ALPFRRVKVVNLLIQVKEP' <MAD>
 A:Cross-references: UNIPARC:UPI0000072EC4; GB:S70799; NID:G547231; PIDN:AAB31177.1; PID

A>Note: this frame-shift variant is designated albumin Bazzano; four additional variants
 R.Menaya, J.; Parrilla, R.; Ayuso, M.S.
 submitted to the EMBL Data Library, March 1995
 A:Reference number: G08292
 A:Accession: G01747
 A:Status: translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-120,'G',122-455 <MEN>
 A:Cross-references: UNIPARC:UPI000016A1A8; EMBL:U22961; NID:G763428; PIDN:AAA64922.1; PI
 R.Lederwood, E.C.; George, P.M.; Peach, R.J.; Brennan, S.O.
 Biochem. J. 308, 321-325, 1995
 A:Title: Endoproteolytic processing of recombinant proalbumin variants by the yeast Kex2
 A:Reference number: S55314; MOID:95275251; PMID:7755581
 A:Accession: S55314
 A:Molecule type: protein
 A:Cross-references: UNIPARC:UPI00001743FA
 R.Meloun, B.; Moravek, L.; Kostka, V.
 FEBS Lett. 58, 134-137, 1975
 A:Title: Complete amino acid sequence of human serum albumin.
 A:Reference number: A91420; MOID:76187907; PMID:1225573
 A:Accession: A91420
 A:Molecule type: protein
 A:Residues: 25-117,'EQ',120-154,'Q',156-193,'E',195-387,'H',389-390,'Y',392-393,'A',395-
 A:Cross-references: UNIPARC:UPI00001743FB
 R.Roehr, U.; Spitelier, G.; Tripler, D.
 Justus Liebig's Ann. Chem. 9, 881-884, 1988
 A:Title: Isolation and structure elucidation of middle-molecular weight peptides from ur
 A:Reference number: S06422
 A>Note: this paper is in German, with an English abstract
 A:Accession: S06422
 A:Molecule type: protein
 A:Residues: 25-48 <ROE>
 A:Cross-references: UNIPARC:UPI0000052CDA
 R.Finch, J.W.; Crouch, R.K.; Knapp, D.R.; Schey, K.L.
 Arch. Biochem. Biophys. 305, 595-599, 1993
 A:Title: Mass spectrometric identification of modifications to human serum albumin treat
 A:Reference number: S36882; MOID:93384321; PMID:8373198
 A:Accession: S36882
 A:Molecule type: protein
 A:Residues: 45-67;141-160;311-337;469-490;570-581 <FIN>
 A:Cross-references: UNIPARC:UPI00000423AC; UNIPARC:UPI00001743FC; UNIPARC:UPI00001743FD;
 R.Kausler, E.; Spitelier, G.
 Biol. Chem. Hoppe-Seyler 372, 849-855, 1991
 A:Title: Bruchstuecke aus Albumin und beta(2)-Mikroglobulin - Bestandteile der Mitteilmo
 A:Reference number: S17599; MOID:92126241; PMID:1772598
 A:Accession: S17599
 A:Molecule type: protein
 A:Residues: 25-54;354-357;431-447 <KAV>
 A:Cross-references: UNIPARC:UPI00000174400; UNIPARC:UPI0000174401; UNIPARC:UPI0000174402
 A>Note: 49-Leu was also found
 R.Carraway, R.E.; Cochran, D.E.; Boucher, W.; Miltra, S.P.
 J. Immunol. 143, 1680-1684, 1989
 A:Title: Structure of histamine-releasing peptides formed by the action of acid proteas
 A:Reference number: A45800; MOID:89341406; PMID:2474609
 A:Accession: A45800
 A:Molecule type: protein
 A:Residues: 166-173 <CAR>
 A:Cross-references: UNIPARC:UPI000004A560
 R.Mogard, M.H.; Kobayashi, K.; Chen, C.; Lee, T.D.; Reeve Jr., J.R.; Shively, J.E.; We
 Biochem. Biophys. Res. Commun. 136, 983-988, 1986
 A:Title: The amino acid sequence of kinetensin, a novel peptide isolated from pepsin-ter
 A:Reference number: A03239; MOID:86242180; PMID:3087352
 A:Accession: A03239
 A:Molecule type: protein
 A:Residues: 166-173,'L' <MOG>
 A:Cross-references: UNIPARC:UPI00000351D2
 R.Galliano, M.; Minchiotti, L.; Porta, F.; Rossi, A.; Ferrri, G.; Madison, J.; Watkins, G
 Proc. Natl. Acad. Sci. U.S.A. 87, 8721-8725, 1990
 A:Title: Mutations in genetic variants of human serum albumin found in Italy.
 A:Reference number: A38255; MOID:91062352; PMID:2247440
 A:Accession: C38255
 A:Molecule type: protein

A:Residues: 76-111 <GAL1>
 A:Cross-references: UNIPARC:UPI0000174403
 A:Accession: B38255
 A:Molecule type: protein
 A:Residues: 82-105,'K',107-110 <GAL2>
 A:Cross-references: UNIPARC:UPI0000174403
 A>Note: this variant is designated albumin Vibro Valentia
 A:Accession: A38255
 A:Molecule type: protein
 A:Residues: 76-93,'K',85-106 <GAL3>
 A:Cross-references: UNIPARC:UPI0000174405
 A>Note: this variant is designated albumin Torino
 R.Minchiotti, L.; Galliano, M.; Zapponi, M.C.; Tenni, R.
 Eur. J. Biochem. 214, 437-444, 1993
 A:Title: The structural characterization and bilirubin-binding properties of albumin Her
 A:Reference number: S33298; MOID:93292504; PMID:8513793
 A:Accession: S33298
 A:Molecule type: protein
 A:Residues: 255-263,'E',265-281 <MIN1>
 A:Cross-references: UNIPARC:UPI0000174406
 A>Note: this variant is designated albumin Herborn
 R.Minchiotti, L.; Galliano, M.; Stoppini, M.; Ferrri, G.; Crespeau, H.; Rochu, D.; Porta,
 Biochem. Biophys. Acta 1119, 232-238, 1992
 A:Title: Two albumin variants with identical electrophoretic mobility are produced by differ
 A:Reference number: S21078; MOID:92190239; PMID:1347703
 A:Accession: S21078
 A:Molecule type: protein
 A:Residues: 354-356,'K',358-378 <MIN2>
 A:Cross-references: UNIPARC:UPI0000174407
 A>Note: this variant is designated albumin Sondrio; another variant Paris-2 is reported,
 R.He, X.M.; Garret, D.C.
 Nature 358, 209-215, 1992
 A:Title: Atomic structure and chemistry of human serum albumin.
 A:Reference number: A46756; MOID:92334427; PMID:1630489
 A:Accession: A46756
 A:Contents: annotation; X-ray crystallography, 2.8 angstroms
 R.Brown, J.R.; Shockley, P.; Behrens, P.O.
 in The Chemistry and Physiology of the Human Plasma Proteins, Bing, D.H., ed., pp.23-40,
 A:Reference number: A94442
 A:Contents: annotation; three-dimensional structure and disulfide bonds
 R.Saber, M.A.; Stockbauer, P.; Moravek, L.; Meloun, B.
 Collect. Czech. Chem. Commun. 42, 564-579, 1977
 A:Title: Disulfide bonds in human serum albumin.
 A:Reference number: A90930
 A:Contents: annotation; disulfide bonds
 R.Jacobsen, C.
 Biochem. J. 171, 453-459, 1978
 A:Title: Lysine residue 240 of human serum albumin is involved in high-affinity binding
 A:Reference number: A90299; MOID:78186630; PMID:656055
 A:Contents: annotation; bilirubin-binding site
 R.Peters, T.; Reed, R.G.
 in Albumin: Structure, Biosynthesis, Function, Peters, J., and Sjolholm, I., eds., 11-20,
 A:Reference number: A94408
 A:Contents: annotation; conformation and active sites.
 A:Contents: annotation; binding sites
 R.Harper, M.E.; Dugaliczyk, A.
 Am. J. Hum. Genet. 35, 565-572, 1983
 A:Title: Linkage of the evolutionarily-related serum albumin and alpha-fetoprotein genes
 A:Reference number: A90028; MOID:83379982; PMID:6192711
 A:Contents: annotation; gene position
 R.Walker, J.E.
 FEBS Lett. 66, 173-175, 1976
 A:Title: Lysine residue 199 of human serum albumin is modified by acetyllysacyclic acid.
 A:Reference number: A46755; MOID:76257808; PMID:955075
 A:Contents: annotation
 A>Note: the nonenzymatic transfer of an acetyl group from aspirin (acetylsalicylic acid
 R.Sohney, J.P.; Fonda, M.L.; Feldhoff, R.C.
 FEBS Lett. 258, 266-268, 1992
 A:Title: Identification of Lys(190) as the primary binding site for pyridoxal 5'-phospha
 A:Reference number: A56294; MOID:92183881; PMID:1544460
 A:Contents: annotation
 A>Note: the nonenzymatic binding of pyridoxal phosphate to lysine-214 is described; in p
 atase activity
 C:Comment: Serum albumin, a predominant protein in the plasma of adults, is synthesized

11rubin, proctophyryn, long-chain fatty acids, prostaglandins, steroid hormones

C:Comment: A large number of variants of human serum albumin have been described.

C:GeneID: GDB:ALB

A:Cross-references: GDB:118990; OMIM:103600

A:Map position: 4q11-4q13

Query Match 91.0%; Score 3108; DB 1; Length 609;

Best Local Similarity 100.0%; Pred. No. 1.8e-196; Indels 0; Gaps 0;

Matches 586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

60 RDANKSEVAHREPKDLEGENFKALVLIIFAQYIQQCFEDHVKLVNVTETPAKTCVADESA 119
24 RDANKSEVAHREPKDLEGENFKALVLIIFAQYIQQCFEDHVKLVNVTETPAKTCVADESA 83
120 ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOBERNECFLOHKDNDPMLPRLVRRPE 179
84 ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOBERNECFLOHKDNDPMLPRLVRRPE 143
180 VDMVCTAFHNDNEETFLKCYLYETARHHPFYAPPELLFPARRYKAAPTECCOAAADKAACL 239
144 VDMVCTAFHNDNEETFLKCYLYETARHHPFYAPPELLFPARRYKAAPTECCOAAADKAACL 203
240 PKLDELRLDSEKASAKORLKCASLQKFGERRAFKAWAVARLSQRPFAEFAVSKLVTDLT 239
204 PKLDELRLDSEKASAKORLKCASLQKFGERRAFKAWAVARLSQRPFAEFAVSKLVTDLT 263
300 KVHTCCGHDLLFCADPRADLAKYICENODSISSKLKECCERPLLEKSHCIAEVENDEMP 359
264 KVHTCCGHDLLFCADPRADLAKYICENODSISSKLKECCERPLLEKSHCIAEVENDEMP 323
360 ADLPSLAADVPSKDYCKNYAEAKDVFELGMFLYEYARRHDPDYSVLLIRLAKTYETTLK 419
324 ADLPSLAADVPSKDYCKNYAEAKDVFELGMFLYEYARRHDPDYSVLLIRLAKTYETTLK 383
420 CCAAADPHCECYAKVPEDEPKPLVEEPQNLIKONCELEFQDGEYKFNALLVRYTKVQVQS 479
384 CCAAADPHCECYAKVPEDEPKPLVEEPQNLIKONCELEFQDGEYKFNALLVRYTKVQVQS 443
480 TPTLVEVSRNLGKVGSKCKKHPAKMPCABDYLSVLIANOLCVLHKRTPVSDVTKCCTE 539
444 TPTLVEVSRNLGKVGSKCKKHPAKMPCABDYLSVLIANOLCVLHKRTPVSDVTKCCTE 503
540 SLVNRRCPSFSALEVDRETYVPEKFNARETFTPHADICTLSEKEROIKKOTALVELVKHKPKA 599
504 SLVNRRCPSFSALEVDRETYVPEKFNARETFTPHADICTLSEKEROIKKOTALVELVKHKPKA 563
600 TKEQLKAVMDDFAAFAFVEKCKKADDKETCFABEGKGLVAASQAALGL 645
564 TKEQLKAVMDDFAAFAFVEKCKKADDKETCFABEGKGLVAASQAALGL 609

F:405-584/Domain: serum albumin repeat homology <SA3>

Query Match 86.2%; Score 2947; DB 2; Length 609;

Best Local Similarity 93.5%; Pred. No. 6.5e-186;

Matches 546; Conservative 23; Mismatches 15; Indels 0; Gaps 0;

60 RDANKSEVAHREPKDLEGENFKALVLIIFAQYIQQCFEDHVKLVNVTETPAKTCVADESA 119
16 RDANKSEVAHREPKDLEGENFKALVLIIFAQYIQQCFEDHVKLVNVTETPAKTCVADESA 75
120 ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOBERNECFLOHKDNDPMLPRLVRRPE 179
76 ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOBERNECFLOHKDNDPMLPRLVRRPE 135
180 VDMVCTAFHNDNEETFLKCYLYETARHHPFYAPPELLFPARRYKAAPTECCOAAADKAACL 239
136 VDMVCTAFHNDNEETFLKCYLYETARHHPFYAPPELLFPARRYKAAPTECCOAAADKAACL 195
240 PKLDELRLDSEKASAKORLKCASLQKFGERRAFKAWAVARLSQRPFAEFAVSKLVTDLT 239
196 PKLDELRLDSEKASAKORLKCASLQKFGERRAFKAWAVARLSQRPFAEFAVSKLVTDLT 255
300 KVHTCCGHDLLFCADPRADLAKYICENODSISSKLKECCERPLLEKSHCIAEVENDEMP 359
256 KVHTCCGHDLLFCADPRADLAKYICENODSISSKLKECCERPLLEKSHCIAEVENDEMP 315
360 ADLPSLAADVPSKDYCKNYAEAKDVFELGMFLYEYARRHDPDYSVLLIRLAKTYETTLK 419
316 ADLPSLAADVPSKDYCKNYAEAKDVFELGMFLYEYARRHDPDYSVLLIRLAKTYETTLK 375
420 CCAAADPHCECYAKVPEDEPKPLVEEPQNLIKONCELEFQDGEYKFNALLVRYTKVQVQS 479
376 CCAAADPHCECYAKVPEDEPKPLVEEPQNLIKONCELEFQDGEYKFNALLVRYTKVQVQS 435
480 TPTLVEVSRNLGKVGSKCKKHPAKMPCABDYLSVLIANOLCVLHKRTPVSDVTKCCTE 539
436 TPTLVEVSRNLGKVGSKCKKHPAKMPCABDYLSVLIANOLCVLHKRTPVSDVTKCCTE 495
540 SLVNRRCPSFSALEVDRETYVPEKFNARETFTPHADICTLSEKEROIKKOTALVELVKHKPKA 599
496 SLVNRRCPSFSALEVDRETYVPEKFNARETFTPHADICTLSEKEROIKKOTALVELVKHKPKA 555

RESULT 3

serum albumin precursor - cat

C:Species: Felis silvestris catus (domestic cat)

C>Date: 19-Oct-1995 #sequence_Revision 03-Nov-1995 #text_change 09-Jul-2004

C:Accession: J04660; S57632

R:Hilger, C.; Grigioni, F.; Hentges, F.

Gene 169, 295-296, 1996

A:Title: Sequence of the gene encoding cat (Felis domesticus) serum albumin.

A:Reference number: J04660; MUID:96194824; PMID:8647469

A:Molecule type: mRNA

A:Accession: J04660

A:Cross-references: UNIPROT:P49064; UNIPARC:UPI00001257C2; EMBL:X04842; NID:9886484; PI

A:Experimental source: liver

C:Comment: This protein is the major protein component in plasma. It functions as a mul-

ein has 35 conserved cysteine residues.

C:Superfamily: Serum albumin; serum albumin repeat homology

C:Keywords: Liver; Plasma

F:1-18/Domain: signal sequence #status predicted <SIG>

F:19-24/Domain: propeptide #status predicted <PRP>

F:25-608/Product: serum albumin #status predicted <MAT>

F:28-202/Domain: serum albumin repeat homology <SA1>

F:221-394/Domain: serum albumin repeat homology <SA2>

F:413-592/Domain: serum albumin repeat homology <SA3>

Query Match 76.9%; Score 2627; DB 2; Length 608; Best Local Similarity 80.1%; Pred. No. 6,7e-165; Matches 493; Conservative 53; Mismatches 157; Indels 10; Gaps 1;

Table with columns: QY, DB, Accession, and sequence alignment. Includes entries for SSVLEGOAKERFAMLVKGRDANKSEVAFRFDLGEENFKALVLLAFAQYLQCCPEEDHV 100 and other sequences.

serum albumin precursor - horse
C/Species: Equus caballus (domestic horse)
C/Date: 31-Dec-1993 #sequence_rev: 31-Dec-1993 #ext_change 09-Jul-2004
C/Accession: S34053
R/Ho, J.X.; Holowachuk, E.W.; Norton, E.J.; Twigg, P.D.; Carter, D.C.
Eur. J. Biochem. 215, 205-212, 1993
A>Title: X-ray and primary structure of horse serum albumin (Equus caballus) at 0.27-nm
A/Reference number: S34053; M01D:93345495; PMID:8344282
A/Accession: S34053
A/Molecule type: mRNA
A/Residues: 1-607 <HOA>
A/Cross-references: UNIPROT:P35747; UNIPARC:UPI00001257C3; GB:X74045; NID:q399671; PIND:
C/Comment: Serum albumin is synthesized in the liver as preproalbumin. It binds copper,
teroid hormones (weak bonds with these hormones promote their transfer across the membra
C/Superfamily: serum albumin; serum albumin repeat homology
C/Keyword: carrier protein; duplication; metal binding; plasma
F:1-16/Domain: signal sequence #status predicted <SIG>
F:19-24/Domain: propeptide #status predicted <PRO>
F:25-607/Product: serum albumin #status predicted <MAT>
F:29-201/Domain: serum albumin repeat homology <SA1>
F:220-393/Domain: serum albumin repeat homology <SA2>
F:412-591/Domain: serum albumin repeat homology <SA3>

F:27/Binding site: copper (His) #status predicted
F:77-86,99-115,114-125,147-192,191-200,223-269,268-276,288-302,301-312,339-384,383-392,4
F:263/Binding site: bilirubin (Iys) #status predicted

Table with columns: QY, DB, Accession, and sequence alignment. Includes entries for SSVLEGOAKERFAMLVKGRDANKSEVAFRFDLGEENFKALVLLAFAQYLQCCPEEDHV 100 and other sequences.

serum albumin precursor [validated] - bovine
N/Alternate names: 67k protein; preproalbumin
N/Species: Bos primigenius taurus (cattle)
C/Date: 24-Apr-1984 #sequence_revision: 30-Sep-1993 #ext_change 09-Jul-2004
C/Accession: A38885; A36401; A91258; B60809; S10780; D45800; A26693; A90309; A91458; A94
R:Holowachuk, E.W.; Stoltenberg, J.K.; Reed, R.G.; Fetters Jr., T.
submitted to the EMBL data library, August 1991
A/Description: Bovine serum albumin: cDNA sequence and expression.
A/Reference number: A38885
A/Accession: A38885
A/Molecule type: mRNA
A/Residues: 1-607 <HOL>
A/Cross-references: UNIPROT:P04277; UNIPARC:UPI0000174408; EMBL:M73215
R:Hirayama, K.; Akashi, S.; Furuya, M.; Fukuhara, K.
Biochem. Biophys. Res. Commun. 173, 639-646, 1990
A>Title: Rapid confirmation and revision of the primary structure of bovine serum album
A/Reference number: A36401; M01D:91083649; PMID:2260975
A/Accession: A36401

A:Molecule type: mRNA
 A:Residues: 1-607 <BRO>
 A:Cross-references: UNIPROT:P14639; UNIPARC:UPI00001257GB; EMBL:X17055; NID:G1386; PIDD:
 C:Comment: Serum albumin is synthesized in the liver as preproalbumin. It binds copper,
 steroid hormones (weak bonds with these hormones promote their transfer across the membra
 C:Superfamily: serum albumin; serum albumin repeat homology
 C:Keywords: carrier protein; duplication; metal binding; plasma
 F:1-18/Domain: signal sequence #status predicted <PRO>
 F:19-24/Domain: propeptide #status predicted <PRO>
 F:25-607/Product: serum albumin #status predicted <MAT>
 F:29-301/Domain: serum albumin repeat homology <SA1>
 F:220-393/Domain: serum albumin repeat homology <SA2>
 F:412-593/Domain: serum albumin repeat homology <SA3>
 F:127/Binding site: copper (His) #status predicted
 F:77-86_99-115_114-125_147-192_191-200_223-269_268-276_288-302_301-312_339-384_383-392_4
 F:263/Binding site: bilirubin (Lys) #status predicted

Query Match 71.3%; Score 2437.5; DB 1; Length 607;
 Best Local Similarity 75.0%; Pred. No. 1,8e-152;
 Matches 438; Conservative 73; Mismatches 72; Indels 1; Gaps 1;

QY	60	RAHAKSEVAVHRRPKDGGSENFKALVLIAPAOYLQCCPFEDHVKLVNVEVTEFAKTCVAADBSA	119
DB	24	RDTMSEIARHRFNDDJSENFQGLVLIAPSOYLQCCPFEDHVKLVNVEVTEFAKTCVAADBSH	83
QY	120	ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOPEBNECFLOHKDNPMLPRLVPE	179
DB	84	ACGDSKSLHTLFGDELCKVATLRETYGEMADCCCKOPEBNECFLOHKDNPMLPRLVPE	142
QY	180	VDMVCTAHPDNEBETFLKTLVETLARRRPPRYAPPELLFPKRYKAAPTECCOADRACLL	239
DB	143	PTLTCSEAFPADEKKEKFKVLYEARRRPPRYAPPELLFPKRYKAAPTECCOADRACLL	202
QY	240	PKLDELDRDGRKASAKORLCKASLQKFRGAPAPMAVARLSORFPAEFAEYKSLVTDLT	299
DB	203	PKLDAREKLVLASAFQRLKCSLQKFRGAPAPMAVARLSORFPAEFAEYKSLVTDLT	262
QY	300	KVHTCECHSDLLSCADDRADLAKYICENODSISSKLKECCERPLREKSHCIAEVENDEMP	359
DB	263	KVHKECHSDLLSCADDRADLAKYICDHODALSSKLECCERPLREKSHCIAEVDRAVPE	322
QY	360	ADLPSLADPVSQKCYKQYAEAKQVFLGMPLEVEYAKRRPDRYSVLLIAYLATYETTLK	419
DB	323	ENLPLPLADPVAEDKCYKQYAEAKQVFLGSPLEVEYARRRBRVAVSLIAYLAKYEATLDD	382
QY	420	CSAANDPHHCYAKVPEFEPKPIVEEPPNLIKONCELEPEOEGYKFFQVALLVRYTKKAPQVS	479
DB	383	CSAKEDPHACVATVFPKLVNDEPQNLKKNCELEPEKGGYGFQVALLVRYTRKAPQVS	442
QY	480	TEPLIVEVSHNLGKVGSKCCCKNPEAKMPCAEDYLSVLIQLCVLHKEKTPVSDRVTKCTE	539
DB	443	TEPLIVEVSHNLGKVGKCCCKAKPESEMPCTEDYLSIILNRVLCVHKEKTPVSEKVTCCTE	502
QY	540	SLVNRPPGSALEVDDETYPKPEFMAETFPFHADITLSEKEROIKQVLIYLVKAKKPA	599
DB	503	SLVNRPPGSDLLTLDDETYPKPEFMAETFPFHADITLSEKEROIKQVLIYLVKAKKPA	562
QY	600	TREOLKAAWMDPAAPFKCCCKADDDKETSFAEBSKRLVAASQAL	643
DB	563	TREOLKAVMNFVAFAVVDKCCAADDKEGEFLVBSRKLVAASQAL	606

RESULT 7
 ABRIS
 serum albumin precursor - rat
 N:Alternate names: preproalbumin
 C:Species: Rattus norvegicus (Norway rat)
 C>Date: 31-May-1979 #sequence (Revision 31-May-1979 #text change 09-Jun-2004
 C:Accession: A93872; A92211; A91946; A91940; C45800; I57621; A03233
 R:Sargent, T.D.; Yang, M.; Bonner, J.
 Proc. Natl. Acad. Sci. U.S.A. 78, 243-246, 1981
 A:Title: Nucleotide sequence of cloned rat serum albumin messenger RNA.
 A:Reference number: A93872; MUID:81223722; PMID:7017712

Query Match 71.1%; Score 2431; DB 1; Length 608;
 Best Local Similarity 73.5%; Pred. No. 4.9e-152;
 Matches 429; Conservative 82; Mismatches 73; Indels 0; Gaps 0;

A:Accession: A93872
 A:Molecule type: mRNA
 A:Residues: 1-608 <SAR>
 A:Cross-references: UNIPROT:P02770; UNIPARC:UPI00001257CA; GB:V01222; GB:J00699; NID:955
 J:Struzs, A.W.; Bennett, C.D.; Donohue, A.M.; Rodkey, J.A.; Alberts, A.W.
 J:Biochem. Chem. 252, 6846-6855, 1977
 A:Title: Rat liver pre-proalbumin: complete amino acid sequence of the pre-piece. Analys
 A:Reference number: A92211; MUID:77249657; PMID:893447
 A>Note: Cleavages during protein maturation
 A:Accession: A92211
 A:Molecule type: protein
 A:Residues: 1-38 <STR>
 A:Cross-references: UNIPARC:UPI0000174416
 R:Isemura, S.; Ikenaka, T.
 J:Biochem. 83, 35-48, 1978
 A:Title: Amino acid sequences of fragments I and II obtained by cyanogen bromide cleavag
 A:Reference number: A91946; MUID:78109429; PMID:564345
 A:Accession: A91946
 A:Molecule type: protein
 A:Residues: 25-222 <ISI>
 A:Cross-references: UNIPARC:UPI0000174417
 R:Isemura, S.; Ikenaka, T.
 J:Biochem. 79, 1183-1196, 1976
 A:Title: Fragmentation of rat serum albumin by cyanogen bromide cleavage and the amino a
 A:Reference number: A91940; MUID:76260153; PMID:956149
 A:Accession: A91940
 A:Molecule type: protein
 A:Residues: 223-288 <IS2>
 A:Cross-references: UNIPARC:UPI0000174418; UNIPARC:UPI0000174419
 A>Note: 262-Ieu was also found
 R:Aoyagi, Y.; Ikenaka, T.; Tshida, F.
 Cancer Res. 38, 3483-3486, 1978
 A:Title: Copper (II)-binding ability of human alpha-fetoprotein.
 A:Reference number: A90758; MUID:79001617; PMID:80265
 A:Contents: annotation; copper binding
 R:Carraway, R.E.; Cochran, D.E.; Boucher, W.; Mitra, S.P.
 J:Immunol. 143, 1680-1684, 1989
 A:Title: Structures of histamine-releasing peptides formed by the action of acid proteas
 A:Reference number: A45800; MUID:89341406; PMID:2474609
 A:Accession: C45800
 A:Status: preliminary
 A:Molecule type: protein
 A:Residues: 166-173 <CAR>
 A:Cross-references: UNIPARC:UPI000017441A
 R:Heard, J.
 Mol. Cell. Biol. 7, 2425-2434, 1987
 A:Title: Determinants of rat albumin promoter tissue specificity analyzed by an improved
 A:Reference number: I57621; MUID:87286876; PMID:3475566
 A:Accession: I57621
 A:Molecule type: DNA
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Cross-references: UNIPARC:UPI00001188B8; GB:M16825; NID:9202828; PIDD:AAA40712.1; PID:
 C:Superfamily: serum albumin; serum albumin repeat homology
 C:Keywords: carrier protein; duplication; metal binding; plasma
 F:1-18/Domain: signal sequence #status experimental <PRO>
 F:19-24/Domain: propeptide #status experimental <PRO>
 F:25-608/Product: serum albumin #status experimental <MAT>
 F:29-301/Domain: serum albumin repeat homology <SA1>
 F:221-394/Domain: serum albumin repeat homology <SA2>
 F:413-592/Domain: serum albumin repeat homology <SA3>
 F:127/Binding site: copper (His) #status experimental
 F:77-86_99-115_114-125_148-193_192-224_224-270_269-277_289-303_302-313_340-385_384-393_4

Query Match 71.1%; Score 2431; DB 1; Length 608;
 Best Local Similarity 73.5%; Pred. No. 4.9e-152;
 Matches 429; Conservative 82; Mismatches 73; Indels 0; Gaps 0;

QY	60	RAHAKSEVAVHRRPKDGGSENFKALVLIAPAOYLQCCPFEDHVKLVNVEVTEFAKTCVAADBSA	119
DB	24	RDTMSEIARHRFNDDJSENFQGLVLIAPSOYLQCCPFEDHVKLVNVEVTEFAKTCVAADBSA	83
QY	120	ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOPEBNECFLOHKDNPMLPRLVPE	179


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84 ENCDKSIHTLFGDKLCAIPKLRDNYGELADCCAKQBERNECFLOHNDNDPMLPRLVPRPE 143
180 VDWCTAFHNDNEETFLKYLVEIARRRHPYFAPBELLFPARKYKAAFPTECCQAADKAAACL 239
144 AENCKSTFQENPPTSFLGHYIHEVARRRHPYFAPBELLFYAEKYMVLLQCCSTESPKAACL 203
240 PKLDELREDEGKASSAKORLKCASLQKFGERRAFKAWAVARLSQRPKAPAEVSKLVTDLT 299
204 PKLDVAVERKALVAARVRMRKSSMQRFGEERPAKAWAARMSQRPNAPAEIITLGLADVT 263
300 KVNTECGHDLLEGADRDADLAKYICENODSISSEKLECCERPLLEKSHCIAEVENDEMP 359
264 KINKECGHDLLEGADRDADLAKYICENODSISSEKLECCERPLLEKSHCIAEVENDEMP 323
360 ADLPSIAADPVEDKEVCNKYAEAKDVLGTFELYSRRHPDYSVSLLRLLAKKYEATLEK 383
324 ADLPSIAADPVEDKEVCNKYAEAKDVLGTFELYSRRHPDYSVSLLRLLAKKYEATLEK 383
420 CCAAADPHECYAKVDFEFPKPLVEEPONLTKONCELEFQJLGEYKRONALLVRYTKKPVQVS 479
384 CCAEGDPACGTVLAFQPLVEEPKPLVKTNCLELYEKGQNAVLVRYTKKAPQVS 443
480 TPTLVEYSRNLGKVGSKCKRPEAKRMPCAEDYLSVLANQLCVLHEKTPVSDRVTKCCCTE 539
444 TPTLVEYSRNLGKVGSKCKRPEAKRMPCAEDYLSVLANQLCVLHEKTPVSDRVTKCCCTE 503
540 SLVNRRCFSALEVDYETVYVPEKFNAAETFTFHADICTLSEKERQIKKQDTALVELVKRKPKA 599
504 SLVNRRCFSALEVDYETVYVPEKFNAAETFTFHADICTLSEKERQIKKQDTALVELVKRKPKA 563
600 TKEQLKAVMDPFAFVVEKCKKADDKETCPAEEGSKVVAASQAAL 643
564 TEBQLRTVLDGNPFAFVQKCCAADPHECYAKVDFEFPKPLVEEPONLTKONCELEFQJLGEYKRONALLVRYTKKPVQVS 607

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RESULT 8

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ABP85 Serum albumin precursor - pig (fragment)
C:Species: Sus scrofa domestica (domestic pig)
C>Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 09-Jul-2004
C:Accession: S01382; A61006
R:Meinertock, J.; Baldwin, G.S.
Nucleic Acids Res. 16, 9045, 1988
A:Title: Nucleotide sequence of porcine liver albumin.
A:Reference number: S01382; MUID:89016582; PMID:3174440
A:Accession: S01382
A:Status: translation not shown
A:Molecule type: mRNA
A:Residues: 1-605 <MEI>
A:Cross-references: UNIPROT:P08835; UNIPARC:UPI00001257C7; EMBL:X12422; NID:91875; P1DN:
R:Limebeck, H.; Sakarya, H.; Chu, W.; MacKinnon, M.
J. Bone Miner. Res. 4, 235-241, 1989
A:Title: Serum albumin and its acid hydrolysis peptides dominate preparations of mineral
A:Reference number: A61006; MUID:89265769; PMID:2728927
A:Accession: A61006
A:Molecule type: protein
A:Residues: 23-51,'X','53-54','XXXXG','146','E','148','E','150-151','XV','155 <LIM>
A:Cross-references: UNIPARC:UPI0000174414; UNIPARC:UPI0000174415
A:Experimental source: dental enamel
A:Note: albumin and other serum proteins are also found in bone
C:Comment: Serum albumin is synthesized in the liver as preproalbumin. It binds copper,
ceroid hormones (weak bonds with these hormones promote their transfer across the membra
C:Superfamily: serum albumin; serum albumin repeat homology
C:Keywords: carrier protein; duplication; metal binding; plasma
F:1-16/Domain: signal sequence (fragment) #status predicted <SIG>
F:17-22/Domain: propeptide #status predicted <PRO>
F:23-605/Product: serum albumin #status predicted <MAT>
F:23-199/Domain: serum albumin repeat homology <SA1>
F:218-331/Domain: serum albumin repeat homology <SA2>
F:410-589/Domain: serum albumin repeat homology <SA3>
F:75-84,97-113,112-123,145-190,189-198,221-267,266-274,286-300,299-310,337-382,381-390,4
F:261/Binding site: bilinubin (lys) #status predicted

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Query Match 70.7%; Score 2416.5; DB 1; Length 605;
Best Local Similarity 76.1%; Pred. No. 4,4e-151;
Matches 439; Conservative 67; Mismatches 70; Indels 1; Gaps 1;

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60 RDAHKEVARRFKDLEGBNFKALVLAFAQYIQCCPEEDHVKLVNTEPAKTCVADESA 119
22 RDTYKSEIARRFQDLGEOYFKGLVLLTAFSGHLOCCYEBEHLKVRVTEPAKTCVADESA 81
120 ENCDKSIHTLFGDKLCTVATLRETYGEMADCCAKQBERNECFLOHNDNDPMLPRLVPRPE 179
82 ENCDKSIHTLFGDKLCAIPKLRDNYGELADCCAKQBERNECFLOHNDNDPMLPRLVPRPE 140
180 VDWCTAFHNDNEETFLKYLVEIARRRHPYFAPBELLFPARKYKAAFPTECCQAADKAAACL 239
141 PVALCADFOEDQKFMGKTYEIARRRHPYFAPBELLFYAIIYDVSSECCQAADKAAACL 200
240 PKLDELREDEGKASSAKORLKCASLQKFGERRAFKAWAVARLSQRPKAPAEVSKLVTDLT 299
201 PKTEHREKVLTAQKORLKCASLQKFGERRAFKAWAVARLSQRPKAPAEVSKLVTDLT 260
300 KVNTECGHDLLEGADRDADLAKYICENODSISSEKLECCERPLLEKSHCIAEVENDEMP 359
261 KVNTECGHDLLEGADRDADLAKYICENODSISSEKLECCERPLLEKSHCIAEVENDEMP 320
360 ADLPSIAADPVEDKEVCNKYAEAKDVLGTFELYSRRHPDYSVSLLRLLAKKYEATLEK 419
321 ADLPSIAADPVEDKEVCNKYAEAKDVLGTFELYSRRHPDYSVSLLRLLAKKYEATLEK 380
420 CCAAADPHECYAKVDFEFPKPLVEEPONLTKONCELEFQJLGEYKRONALLVRYTKKPVQVS 479
381 CCAKEDPACGTVLAFQPLVEEPKPLVKTNCLELYEKGQNAVLVRYTKKAPQVS 440
480 TPTLVEYSRNLGKVGSKCKRPEAKRMPCAEDYLSVLANQLCVLHEKTPVSDRVTKCCCTE 539
441 TPTLVEYSRNLGKVGSKCKRPEAKRMPCAEDYLSVLANQLCVLHEKTPVSDRVTKCCCTE 500
540 SLVNRRCFSALEVDYETVYVPEKFNAAETFTFHADICTLSEKERQIKKQDTALVELVKRKPKA 599
501 SLVNRRCFSALEVDYETVYVPEKFNAAETFTFHADICTLSEKERQIKKQDTALVELVKRKPKA 560
600 TKEQLKAVMDPFAFVVEKCKKADDKETCPAEEGSKVVAASQAAL 643
561 TEBQLRTVLDGNPFAFVQKCCAADPHECYAKVDFEFPKPLVEEPONLTKONCELEFQJLGEYKRONALLVRYTKKPVQVS 607

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RESULT 9

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JCS538 albumin - Mongolian jird
C:Species: Meriones unguiculatus (Mongolian jird)
C>Date: 05-Mar-1998 #sequence_revision 13-Mar-1998 #text_change 09-Jul-2004
C:Accession: JCS538
R:Yoshida, K.; Seto-Oshima, A.; Sinohara, H.
DNA Res. 4, 351-354, 1997
A:Title: Sequencing of cDNA encoding serum albumin and its extrahepatic synthesis in ch
A:Reference number: JCS538; MUID:98116663; PMID:9455485
A:Accession: JCS538
A:Molecule type: mRNA
A:Residues: 1-609 <YOS>
A:Cross-references: UNIPROT:O35090; UNIPARC:UPI00001257C5; DDBJ:AB006197; NID:92317277;
A:Experimental source: liver
C:Superfamily: serum albumin; serum albumin repeat homology
F:122-395/Domain: serum albumin repeat homology <SA2>
Query Match 69.8%; Score 2387.5; DB 2; Length 609;
Best Local Similarity 73.8%; Pred. No. 3.5e-149;
Matches 432; Conservative 65; Mismatches 87; Indels 1; Gaps 1;
60 RD-AHKEVARRFKDLEGBNFKALVLAFAQYIQCCPEEDHVKLVNTEPAKTCVADESA 118
24 RDAHKEVARRFKDLEGBNFKALVLAFAQYIQCCPEEDHVKLVNTEPAKTCVADESA 83
119 AENCDKSIHTLFGDKLCTVATLRETYGEMADCCAKQBERNECFLOHNDNDPMLPRLVPR 178

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Db 84 AENCDKSLHTLFGDKC... 143
 Qy 179 EVDVMCTAPFDNEBTEFLK... 238
 Db 144 EPDAMCTAFEGENAE... 203
 Qy 239 LPKLDELDRBGKAS... 298
 Db 204 TPKLIDLKFKALV... 263
 Qy 299 TKYHTECGHDDL... 358
 Db 264 TKYTOECCHD... 323
 Qy 359 PADLPLAADFV... 418
 Db 324 PADLPLAADFV... 393
 Qy 419 KCGAADDPH... 478
 Db 384 KCGAADDPH... 443
 Qy 479 STPLLVFVSN... 538
 Db 444 STPLLVFVSN... 503
 Qy 539 ESTVNRPR... 598
 Db 504 GSTVNRPR... 563
 Qy 599 ATKQOLKAV... 643
 Db 564 ATKQOLKAV... 608

Qy 195 LKTYLVEI... 254
 Db 61 MGHYHIEV... 120
 Qy 255 KORIKCAS... 314
 Db 121 RQMKCSS... 180
 Qy 315 DDRADLAK... 374
 Db 181 DDBAEI... 240
 Qy 375 VCKNVA... 434
 Db 241 VCKNVA... 300
 Qy 435 DERKPL... 494
 Db 301 AEFQPL... 360
 Qy 495 SKCCKE... 554
 Db 361 TKCCT... 420
 Qy 555 EYVPE... 587
 Db 421 EYVPE... 453

RESULT 10
 A05139
 serum albumin - mouse (fragment)
 C/Species: Mus musculus (house mouse)
 C/Date: 05-Jun-1987 #sequence_rev1519 17-Mar-2000 #text_change 09-Jul-2004
 C/Accession: A05139; I48638
 R;/Minghetti, P.P.; Law, S.W.; Dugaliczyk, A.
 Mol. Biol. Evol. 2, 347-358, 1985
 A;/Title: The rate of molecular evolution of alpha-fetoprotein approaches that of pseudog
 A;/Reference number: A93055; MUID:88216123; PMID:2452956
 A;/Accession: A05139
 A;/Molecule type: mRNA
 A;/Residues: 1-418 <MIN>
 A;/Cross-references: UNIPROT:P07724; UNIPARC:UPI000016CBE6; GB:MI6111; NID:9191764; PIDN:
 R;/Boccardo, C.; Deschatrete, J.; Meunier-Rottival, M.
 Gene 88, 181-186, 1990
 A;/Title: Empty and occupied insertion site of the truncated LINE-1 repeat located in the
 A;/Reference number: I48638; MUID:90269606; PMID:1971802
 A;/Accession: I48638
 A;/Status: preliminary; translated from GB/EMBL/DBJ
 A;/Molecule type: DNA
 A;/Residues: 379-453 <BOC>
 A;/Cross-references: UNIPARC:UPI000016CEAF; EMBL:X13060; NID:952939; PIDN:CAA1458.1; PII
 C;/Superfamily: serum albumin; serum albumin repeat homology
 C;/Keywords: carrier protein; duplication; metal binding; plasma
 F;/1-104/Domain: serum albumin repeat homology (fragment) <SA1>
 F;/123-296/Domain: serum albumin repeat homology <SA2>
 F;/315-453/Domain: serum albumin repeat homology (fragment) <SA3>

RESULT 11
 ABCS
 serum albumin precursor - chicken
 C/Species: Gallus gallus (chicken)
 C/Date: 31-Dec-1993 #sequence_rev1519 31-Dec-1993 #text_change 09-Jul-2004
 C/Accession: S15571; A05078; A13451
 R;/Casasdy, A.I.; Salkild, C.K.; Baverstock, P.; Wallace, J.C.
 submitted to the EMBL data library, July 1991
 A;/Reference number: S15571
 A;/Accession: S15571
 A;/Molecule type: mRNA
 A;/Residues: 1-615 <CAAS>
 A;/Cross-references: UNIPROT:P19121; UNIPARC:UPI00001257C1; EMBL:X60688; NID:963747; PIDN:
 R;/Hache, R.U.G.; Wabkocil, R.; Vasa, M.; Roy, R.N.; Lau, P.C.K.; Deeley, R.G.
 J. Biol. Chem. 258, 4556-4564, 1983
 A;/Title: The 5' noncoding and flanking regions of the avian very low density apolipoprot
 A;/Reference number: A05078; MUID:83161037; PMID:6187737
 A;/Accession: A05078
 A;/Molecule type: DNA
 A;/Residues: 1-28 <HAC>
 A;/Cross-references: UNIPARC:UPI000017128E; GB:V00381; NID:963038; PIDN:CAA23680.1; PID:
 R;/Rosen, A.M.; Geller, D.M.
 Biochem. Biophys. Res. Commun. 78, 1060-1066, 1977
 A;/Title: Chicken microsomal albumin: amino terminal sequence of chicken proalbumin.
 A;/Reference number: A13451; MUID:78019943; PMID:911327
 A;/Accession: A13451
 A;/Molecule type: protein
 A;/Residues: 19-23, 'M', '25-30 <ROS>
 A;/Cross-references: UNIPARC:UPI000017441B
 C;/Comment: Serum albumin is synthesized in the liver as preproalbumin. It binds copper,
 moneis (weak bonds with these hormones promote their transfer across the membrane), thy,
 C;/Superfamily: serum albumin; serum albumin repeat homology
 C;/Keywords: carrier protein; duplication; metal binding; plasma
 F;/1-18/Domain: signal sequence #status predicted <SID>
 F;/19-26/Domain: propeptide #status predicted <PRO>
 F;/27-613/Produce: serum albumin #status predicted <MAT>
 F;/32-206/Domain: serum albumin repeat homology <SA1>
 F;/225-398/Domain: serum albumin repeat homology <SA2>
 F;/417-596/Domain: serum albumin repeat homology <SA3>
 F;/30/Binding site: copper (His) #status predicted
 F;/80-89; 102-118; 117-128; 152-197; 196-205; 228-274; 273-281; 293-307; 306-317; 344-389; 388-397,
 Query Match 45.7%; Score 1562; DB 1; Length 615;
 Best Local Similarity 46.9%; Pred. No. 5; 5e-95;

Matches 276; Conservative 118; Mismatches 192; Indels 2; Gaps 2;

Oy	60	RDA-HKSEVAHRRFDLGEENPKALVLLAFAPQYLQOCPEPHVTKLVNEVTFPAKTVADDES	118
Db	26	RDABHKSEIARRVYDLEKEETFKAVAMITFAOYLQRCYEGLSKLVKQVLDLAAQCVANED	85
Oy	119	AENODSILHTLFGDKLCTVAITLRETYGEMADCCAKOBERNEPCLOHNDONPMLER-LVR	177
Db	86	APBCKSLPESIIIDELIQVEKLRDSYGMADCCSKADPERNEPCFLSKVSGQPPVQVQYOR	145
Oy	178	PEVDVMTAFHNDNEETFLKYLVEIARRHRYFYAPBELLFPAKRYKAAFTCCQAAADKAC	237
Db	146	PASDVIQGEYQDNKVSFLGHFIYSVARRHPELVAPALISFAVDREHALQCCCKESDVGAC	205
Oy	238	LRLKLDLDRBGRKASAKORLKASLQKFGERRAKMAVAVLRSRPFKAPBAVSKLVTP	297
Db	206	LDTKEIYVRRERKAKGVSYKQOYFCGLIKQFGDRVFOAQQLYYLSQKYPKAPSEVSKFVHD	265
Oy	298	LTKVHTRECCHDLECCADDRADLAKYICENODSISSKLKECCERPLEKESHCIAREVND	357
Db	266	SIGNHKCCBBDWVCEMDMARMMSNLCSQDDVFSKIKDCCKRPYIERSOCIWEARFDE	325
Oy	358	MPADLPSILAADPVESKDVCKNYAEAKDVFLEGMFLYEYARRHRYDYSVVLLRLAKTYETTL	417
Db	326	KPADLPSILVETKYLIEDKVCSSFEAGHDAFMAEFYEVSRHRPEFSIQLRIRAKGVESLL	385
Oy	418	EKCSAAADPHCEYAKVDFEFPKRVLEBPONLIKONCELFEOLGVEYKFFONALLVRYTKVPO	477
Db	386	EKCCKTNPAECYANAQOILQHIKETQDQVYKTCNDLHDHGEADFKSIIIRYTKKIQPO	445
Oy	478	VSPFTLVESVSNLGRKVSCKCKHBEAKMPCAEDYLSVNLQLCVHLHKTPVPSRVATKCC	537
Db	446	VPTDLLLLETGKMTTIGTKCCQLGEBDRMACSEGLSLVINDTRKQSTTFINNVVSOCC	505
Oy	538	TESLVNRRPCEFSALAEVDETVYVPEFNAETFFHADICTLSEKERQIKQZALVELVHKRP	597
Db	506	SQLYANRRPCTTANGVDTKLVYPPFPNDMFSFDEKLCGAPAEERHVEVGMKLLINLIRKRP	565
Oy	598	KATKEQLKAVMDPFAAFVYKCCCKADDKETCPAEBSGKLVAAASQALGL 645	
Db	566	QMTBEQIKTITADGFTAMVDCCKOSDINTFCGEBEGAMLVQSRAYATLGI 613	

RESULT 12

JC4258
 alpha-fetoprotein precursor - chimpanzee
 C:Species: Pan troglodytes (chimpanzee)
 C>Date: 27-Nov-1995 #sequence_revision 09-Feb-1996 #text_change 09-Jul-2004
 C:Accession: J04258
 R:NBsh10, H.; Gibbs, P.E.M.; Manghetti, P.P.; Zieilinski, R.; Dugalczyk, A.
 Gene 162, 213-220, 1995
 A:Title: The chimpanzee alpha-fetoprotein-encoding gene shows structural similarity to
 A:Reference number: J04258; MUID:96032345; PMID:7557431
 A:Accession: J04258
 A:Molecule type: DNA
 A:Residues: 1-609 <NLS>
 A:Cross-references: UNIPROT:Q28789; UNIPARC:UPI000012A6FA; GB:U21916; NID:9841311; PIDN:
 C:Comment: This protein is a plasma protein produced in the fetal and neonatal liver and
 C:Genetics: similar properties and structure.
 A:Gene: atfP
 A:Map position: 3p
 A:Introns: 29/1; 46/2; 90/3; 161/2; 205/3; 238/2; 281/3; 353/2; 397/3; 430/2; 476/3; 551
 C:Superfamily: serum albumin; serum albumin repeat homology
 C:Keywords: glycoprotein
 F:1-19/Domain: signal sequence #status predicted <SIG>
 F:20-609/Product: alpha-fetoprotein #status predicted <MAT>
 F:29-202/Domain: serum albumin repeat homology <SA1>
 F:221-394/Domain: serum albumin repeat homology <SA2>
 F:413-592/Domain: serum albumin repeat homology <SA3>
 F:442,251/Binding site: carbohydrate (Aen) (covalent) #status predicted
 Query Match 36.9%; Score 1260.5; DB 2; Length 609;

Best Local Similarity 39.7%; Pred. No. 3,4e-75; Matches 238; Conservative 117; Mismatches 238; Indels 7; Gaps 3;

Oy	52	FTAMLYKGDANKSE-----VAHRFKDLDGEENPKALVLLAFAPQYLQOCPEPHVTKLVNEV	106
Db	11	FLNFTESRTHHNENEGIASILDSYQCYABINLTDLATYFPFAQVDEATYKESKVVKDA	70
Oy	107	TEPAKTVADDESANQDKSILHTLFGDKLCTVAITLRETYGEMADCCAKOBERNEPCLOHNDONPMLER-LVR	166
Db	71	LTAIEKPTGDEQAGLLENQLRPELREKREKILEKYGH-SQCCSQSSEGRNCFIAR 129	
Oy	167	DDNP-NLPRLVREVDVMTAFHNDNEETFLKYLVEIARRHRYFYAPBELLFPAKRYKAAFTCCQAAADKAC	225
Db	130	KPFPASIPFQVPEPVTSCSAVEDEDETFMNRKIYIARRHPELVAPALISFAVDREHALQCCCKESDVGAC	189
Oy	226	TECCQAAADKACLLPRLDLDLDRBGRKASAKORLKASLQKFGERRAKMAVAVLRSRPFKAPBAVSKLVTP	285
Db	190	PSCCKAENAVECFQTLAAATVTKELRBSLSLINDQACVMKFGTRTQALITVTKLSQKFTK 249	
Oy	286	AFPAVSKLVTDLTKVHTRECCHDLECCADDRADLAKYICENODSISSKLKECCERPLEKESHCIAREVND	345
Db	250	VNFTLEQKLVDAVHNRHCCRDVLDCLQDGEKIMSYICSQQDITLSNKTTECCKLTLE 309	
Oy	346	KSHCIAEVENDEMPADLPSILAADPVESKDVCKNYAEAKDVFLEGMFLYEYARRHRYDYSVVLLRLAKTYETTL	405
Db	310	RQCCIHAENDEKREGISPLNRFGLDRDQNSSEGEKINIFLASFNHYSRRHROLAVSV 369	
Oy	406	LRLAKTYETTLERKCSAAADPHCEYAKVDFEFPKRVLEBPONLIKONCELFEOLGVEYKFFONALLVRYTKVPO	465
Db	370	ILRVAKGYOELREKCFQTEBNRPLCODGEBELQKYIQESQALMKRSCGLYQKGBEYLYLN 429	
Oy	466	ALLVRYTKKPVQVSTFTLVESVSNLGRKVSCKCKHBEAKMPCAEDYLSVNLQLCVHLHKTPVPSRVATKCC	525
Db	430	APLVAYTKKAPQLTSSSMAITRMAATAATCCQLSEDLKACGEGADLIIHGLICRHE 489	
Oy	526	KTPVSDRYTKCCSTESLVNRRPCEFSALAEVDETVYVPEFNAETFFHADICTLSEKERQIKQZALVELVHKRP	585
Db	490	TTPVNPVGGCCSTSVANRRPCEFSALAEVDETVYVPEFNAETFFHADICTLSEKERQIKQZALVELVHKRP	549
Oy	586	QTLALVELVHKRYKATKEQLKAVMDPFAAFVYKCCCKADDKETCPAEBSGKLVAAASQALGL 645	
Db	550	QEPFLINLVKQKQITTEQLAEAVLADFSGLLEKCCQGEVCEPABESQKLSIKRPAALGV 609	

RESULT 13

FPHU
 alpha-fetoprotein precursor [validated] - human
 N:Alternate names: AFP; alpha-1-fetoprotein; alpha-fetoglobulin
 C:Species: Homo sapiens (man)
 C>Date: 19-Feb-1984 #sequence_revision 19-Feb-1984 #text_change 09-Jul-2004
 C:Accession: A26624; S37655; A93961; A91497; A23699; A61480; A90757; A93042; A0
 R:Gibbs, P.E.M.; Zieilinski, R.; Boyd, C.; Dugalczyk, A.
 Biochemistry 26, 1332-1343, 1987
 A:Title: Structure, polymorphism, and novel repeated DNA elements revealed by a complet
 A:Reference number: A26624; MUID:87185438; PMID:2436661
 A:Accession: A26624
 A:Molecule type: DNA
 A:Residues: 1-609 <GNB>
 A:Cross-references: UNIPROT:P02771; UNIPARC:UPI0000012A9; GB:M6110; NID:9773678; PIDN
 R:McVey, J.H.; Michaelides, K.; Hansen, L.P.; Ferguson-Smith, M.; Tilghman, S.; Krumlau
 Hum. Mol. Genet. 2, 379-384, 1993
 A:Title: A G-3A substitution in an HNF I binding site in the human alpha-fetoprotein ge
 A:Reference number: S37655; MUID:93278385; PMID:7684942
 A:Accession: S37655
 A:Molecule type: DNA
 A:Residues: 1-28 <MCV>
 A:Cross-references: UNIPARC:UPI00016A4DF; EMBL:Z19532; NID:928527; PIDN:CAA79592.1; PI
 R:Morinaga, T.; Sakai, M.; Wegmann, T.G.; Tamaki, T.
 Proc. Natl. Acad. Sci. U.S.A. 80, 4604-4608, 1983
 A:Title: Primary structures of human alpha-fetoprotein and its mRNA.
 A:Reference number: A93961; MUID:83273664; PMID:6192459
 A:Accession: A93961

A:Molecule type: mRNA
 A:Residues: 1-609 <MOR>
 A:Cross-references: UNIPARC:UPI0000012A9; GB:J000077; NID:G311348; PIDN:CNA24758.1; PID:R. Beattie, W.G.; Dugaiczky, A.
 Gene 20, 415-422, 1982
 A>Title: Structure and evolution of human alpha-fetoprotein deduced from partial sequenc
 A:Reference number: A91497; MUID:83158778; PMID:6187626
 A:Accession: A91497
 A:Molecule type: mRNA
 A:Residues: 429-556 <RNA>
 A:Cross-references: UNIPARC:UPI0000174421; GB:J00076
 A:Biochem, P.; Siciliano, R.; Malorni, A.; Marino, G.; Tecce, M.F.; Ceccarini, C.; Terrana
 Biochemistry 30, 5061-5066, 1991
 A>Title: Human alpha-fetoprotein primary structure: a mass spectrometric study.
 A:Reference number: A23699; MUID:91242409; PMID:1709810
 A:Accession: A23699
 A:Molecule type: protein
 A:Residues: 19-45;60-97;102-107;122-184;187-249;255-489;507-609 <PUC>
 A:Cross-references: UNIPARC:UPI0000174422; UNIPARC:UPI0000174423; UNIPARC:UPI0000174424;
 R.Tecce, M.F.; Terrana, B.; Giuliani, M.M.; Ceccarini, C.
 J. Nucl. Med. Allied Sci. 34, 213-216, 1990
 A>Title: Characterization of in vitro expressed human alpha-fetoprotein as highly repro
 A:Reference number: A61480; MUID:91225826; PMID:1709209
 A:Accession: A61480
 A:Molecule type: protein
 A:Residues: 19-45;63-97;102-107;122-184;187-249;255-489;507-609 <TEC>
 A:Cross-references: UNIPARC:UPI0000174422; UNIPARC:UPI0000174424; UNIPARC:UPI0000174425;
 R.Yachnin, S.; Hsu, R.; Hainrikson, R.L.; Miller, J.B.
 Biochim. Biophys. Acta 493, 418-428, 1977
 A>Title: Studies on human alpha-fetoprotein. Isolation and characterization of monomeric
 A:Reference number: A90624; MUID:77242506; PMID:70228
 A:Accession: A90624
 A:Molecule type: protein
 A:Residues: 'S',20-32,'E',24-35 <YAC>
 A:Cross-references: UNIPARC:UPI000017442A
 A:Note: dimeric and trimeric forms have been found in addition to the monomeric form
 R:Hayagi, Y.; Ikenaka, T.; Ichida, F.
 Cancer Res. 37, 3663-3667, 1977
 A>Title: Comparative chemical structure of human alpha-fetoproteins from fetal serum and
 A:Reference number: A90757; MUID:78001760; PMID:71198
 A:Accession: A90757
 A:Molecule type: protein
 A:Residues: 'S',20-30,'A',32-37,'A' <AOY>
 A:Cross-references: UNIPARC:UPI0000174428
 A:Biostrahl, B.; Pihko, H.; Veheri, A.; Seppala, M.; Kontinen, M.;
 Johns Hopkins Med. J. Suppl. 3, 249-255, 1974
 A>Title: 20. Alpha fetoprotein: structure and expression in man and indred mouse strains
 A:Reference number: A93042; MUID:75018719; PMID:4138095
 A:Accession: A93042
 A:Molecule type: protein
 A:Residues: 'S',20-24,'O',26-30,'A',32-35,'E',37-39 <RUO>
 A:Cross-references: UNIPARC:UPI000017442C
 R:Sakai, M.; Morinaga, T.; Umano, Y.; Watanabe, K.; Wegmann, T.G.; Tamaoki, T.
 J. Biol. Chem. 260, 5055-5060, 1985
 A>Title: The human alpha-fetoprotein gene. Sequence organization and the 5' flanking reg
 A:Reference number: A92520; MUID:85182629; PMID:2580830
 A:Contents: annotation; gene, exons and introns
 R:Hayagi, Y.; Ikenaka, T.; Ichida, F.
 Cancer Res. 39, 3571-3574, 1979
 A>Title: alpha-fetoprotein as a carrier protein in plasma and its bilirubin-binding abilit
 A:Reference number: A90759; MUID:80001710; PMID:89900
 A:Contents: annotation; bilirubin binding
 C:Comment: AFP is synthesized by the fetal liver and yolk sac. It occurs in the plasma c
 o trace amounts after birth. The serum level in adults is usually less than 40 ng/ml. AF
 C:Comment: Human AFP binds copper, nickel, and fatty acids as well as, and the bilirubin
 properties.
 C:Genetic:
 A:Gene: GDB:AFP

A:Cross-references: GDB:119660; OMIM:104150
 A:Map position: 4q11-q13
 A:Introns: 29/1; 46/2; 90/3; 161/2; 205/3; 238/2; 281/3; 353/2; 397/3; 430/2; 476/3; 551
 C:Superfamily: serum albumin; serum albumin repeat homology
 C:Keywords: embryo; fetus; globulin; glycoprotein; metal binding; plasma
 F:/18/Domain: signal sequence #status predicted <S>
 F:/19-609/Product: alpha-fetoprotein #status experimental <MA>
 F:/29-202/Domain: serum albumin repeat homology <SA2>
 F:/413-592/Domain: serum albumin repeat homology <SA3>
 F:/22/Binding site: copper (His) #status experimental
 F:/99-114;113-124;148-193;192-201;224-270;269-277;289-303;302-313;384-393;416-462;461-472
 F:/249/Binding site: bilirubin (Lys) #status predicted
 F:/251/Binding site: carbohydrate (Asn) (covalent) #status predicted
 Query Match 36.8%; Score 1256.5; DB 1; Length 609;
 Best Local Similarity 39.5%; Pred. No. 62e-75;
 Matches 237; Conservative 118; Mismatches 238; Indels 7; Gaps 3;

Qy	52	FAMLVKGRDAKSR-----VAHFKDLGSENFKALVLAFAVQLQCCFEDHVKLVNEV	106
Db	11	PLLNFTSRTLRNREYGIASIDSYQCTAETSLADLATIFFAQFVQEAATKVSVMVKA	70
Qy	107	TEPAKTVADDSANNDKSLHLPFGDKLCTVATLRTVGEMADCCAKQRENECFQHK	166
Db	71	LRAIEKPTDDESSGGLNQALPALFEELEKREILKKYH-SDCCSQSEGRHNCFQAK	129
Qy	167	DNRN-NLPRYLREVDVVMCTAFHNEETLKKYLVEIARRHDFYAPBELLFFAKRYKAF	225
Db	130	KEPKASIPFLQVPERPTSEAYBEDEFTMNKFIYELARRHFLVALPTLLMAAVRDKTI	189
Qy	226	TECCQADRAACLPLKDLRDEGKASSAKQRIKCSLQKFGERRAFKAVAVARLQRPFK	285
Db	190	PSCCRAMNAVBCFQTAATVTKELRESSLINLHACVMKNFGTRFQALITVTKLSQKFTK	249
Qy	286	AEPABYSKIWTDLTKYHTCCSGDILLECDDADLAKYICENODSISSLKCCCKEPLKE	345
Db	250	VNFTELOKLVLDVAANHCCGGDLVLDLQDDEKIKMSYICSQDDVTSNKITTECKLTL	309
Qy	346	KSHCIAEVNDEMPADLPFLADPFVESKDVCKNVAARDVFLGMPFLYEYARRBPDYSVV	405
Db	310	RQCCTHAENDEKPELSRWLRFLGDRPDPNSSEKRIIFLASFVHESSRHHPQLAIVS	369
Qy	406	LRLAKTYETLLEKCSAAADPHCCYAKVPEDEKPLVEBPQNTIKONCELPFDLGEEKYFN	465
Db	370	IRVAKGYDELLEKCFQTEPLECCDKGEBELQKIYIEISQALAKRSQGFQKIGBYLLQ	429
Qy	466	ALLVRYTKVPTVPTLVVSVRNLDKVSCKCKNEARMCARDYLVVNLQCLVHRE	525
Db	430	APLVAATKKAPOPDTSSSLMAITRKMAAYATCCQDSEDLKLCGEGADADITLGHLCIRH	489
Qy	526	KIPVSRTYTKCCTSELVNRRPCFSALVVDQETVYVKEFNATFTFHADICTLSEKERQIK	585
Db	490	MPPVNGVGGCCSTTAMRRPFTSSLVVDQETVYVKEFNATFTFHADICTLSEKERQIK	549
Qy	586	QTALVELVYKPKRATKEQLKAVWDPAFAVKECKCKADKXTGPAEGKLVVAASQALG	645
Db	550	QEFILVIVKOKQITTEQLVAVIADPSGILKCCQGEQEVFCFAEBGGKLIISKTRAAAGV	609

RESULT 14
 PFGQ
 alpha-fetoprotein precursor - gorilla
 C:Species: Gorilla gorilla (gorilla)
 C:Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 09-Jul-2004
 C:Accession: A37970
 R:Ryan, S.C.; Zielinski, R.; Dugaiczky, A.
 Genomics 9, 60-72, 1991
 A>Title: Structure of the gorilla alpha-fetoprotein gene and the divergence of primates
 A:Reference number: A37970; MUID:91169517; PMID:1706310
 A:Accession: A37970
 A:Molecule type: DNA
 A:Residues: 1-609 <RYA>

A:Cross-references: UNIPROT:P28050; UNIPARC:UPI000012a6F8; GB:M38272; NID:G817963; PIDD:
 C:Genetics:
 A:Mem position: 4q11-12
 A:Introns: 29/1; 46/2; 90/3; 161/2; 205/3; 238/2; 281/3; 353/2; 397/3; 430/2; 476/3; 551
 C:Superfamily: serum albumin; serum albumin repeat homology
 C:Keywords: embryo; fetus; globulin; glycoprotein; metal binding; plasma
 F:1-18/Domain: signal sequence #status predicted <SIG>
 F:1-609/Product: alpha-fetoprotein #status predicted <MAT>
 F:20-202/Domain: serum albumin repeat homology <SA1>
 F:221-394/Domain: serum albumin repeat homology <SA2>
 F:413-592/Domain: serum albumin repeat homology <SA3>
 F:22/Binding site: copper (His) #status predicted
 F:99-114,113-124,148-193,192-201,224-277,289-303,302-313,384-393,416-462,461-472
 F:249/Binding site: bilirubin (Lys) #status predicted
 F:251/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 36.6%; Score 1249.5; DB 1; Length 609;
 Best Local Similarity 39.2%; Pred. No. 1.8e-74;
 Matches 235; Conservative 119; Mismatches 239; Indels 7; Gaps 3;

QY 52 PIANLVKGRDAHSE-----VAHNRKDLGEMNFALVLIAPAOYLQCCPEPDHVKLVNEV 106
 D 11 FLNLFTESTRLLHRENYGIASLIDSYOCTAELISLADLMTTFPAQFVQERTYKESVKKMXYDA 70
 QY 107 TEPAKTCVADESANCDKSLHTLFGDKLCTVATLRETYGEWADCCAKOEPERNCEPFOHK 166
 D 71 LTAIEKRTGDEQSGCLIBNOPLRFLBLSCHKEKILKRYG-LSDDCSGSEBRHHCFLAHK 129
 QY 167 DDNP-NLPRLVREVDVWCSTAFHNDNETFLKCKLYEIAARRHPYAEELLPFAQRKAAAF 225
 D 130 KPTVASTPLPQVREPVTWVSCAAYEEDRETFMVKFIYEIARRRHFLYADPTILLMAARVYKII 189
 QY 226 TECCQADKAACLLPKDELRLDEGKASSAKRQLKASISQKRGEEAFAKMAVAALSQEPFK 285
 D 190 PSCCKARNAVECFQTKAATVYKELRESSSLNQHCAVMKNGTTFQALITVTKLSQKFTK 249
 QY 286 AEPFAVSKLVATDILKVNTECGGDLRECAADRADLAKYICENQDSISKKECCERKYLE 345
 D 250 VNFPEIQKLVLDVAHVHNEKCGRGLVLDCLDGEKIMNYISGQDITLTKITTECCKLTLE 309
 QY 346 KSHCIAEVENDEMPADLPISLADLVESKDVCKNYAKAKDVEFLYKFLYEAARRHDSYVLT 405
 D 310 RGGQITHAENDEKKEGSLPNLNRFGLBRDFNQFSSGKRNIFELASFMHYSRRHQLAVSV 369
 QY 406 LRLAATYETTLKSCAAADPHECYAKVDFPKLVVEPQVLIKONCELPQDLGEKFKON 465
 D 370 ILRVAKGVOELIEKCFOTENPLKCCODKGEELIKYIORSQALAKRSGCLFQKIDSEYVLON 429
 QY 466 ALIARYTKKVPQVSTPTLVESRNLGKVGSKCCNHPKAKRMPCAEDVLSVVLNQLCYLHE 525
 D 430 AFLVAAYTKKAPQQLSSSELMAITRKMATAATATCCQLSBKILACGEGAAADIIIGHLCTRHE 489
 QY 526 KTPVSDVTKCCSTSLVNRPECFSALEVDETYVPEFNAETFTFHADICTLSEKERQTK 585
 D 490 MTPVNPVGGCCSTSYANRRPCCFSSLVVDDETVVPAFSDDKFIFHKNLCOAQGVALDTMK 549
 QY 586 QTAALVELVYKHKPKATKROKAVMDPAAFTVEKCCAKDDKPELCPABEKKVLAASQALGL 645
 D 550 QEFLINLVKQKQPTTEBQLFTVIADPFGSLIEKCCCGOEOBVCFAFBEGKLSIKRTKTLGV 609

A:Molecule type: mRNA
 A:Residues: 3-607 <MOS>
 A:Cross-references: UNIPROT:P14872; UNIPARC:UPI00001714F8; GB:M21442; NID:G213930; PIDD:
 R:Schopp, M.; Doebbeling, U.; Wagner, U.; Rytffel, G. U.
 U. Mol. Biol. 199, 83-93, 1988
 A:Title: 5'-flanking and 5'-proximal exon regions of the two Xenopus albumin genes. Del
 A:Reference number: S02692; MOID:8812470; PMID:2451026
 A:Accession: S02693
 A:Status: not compared with conceptual translation
 A:Molecule type: DNA
 A:Residues: 148 <SCH>
 A:Cross-references: UNIPARC:UPI000017441E; EMBL:Z26826
 R:Wolfe, A.P.; Glover, J.E.; Martin, S.C.; Temilwood, M.P.R.; Williams, J.L.; Tate, J
 Eur. J. Biochem. 146, 489-496, 1985
 A:Title: Deinduction of transcription of Xenopus 74-kDa albumin genes and deestabilizati
 A:Reference number: A05288; NID:85126974; PMID:3971963
 A:Accession: A05288
 A:Molecule type: mRNA
 A:Residues: 459-502, 'L', 504-557 <WOL>
 A:Cross-references: UNIPARC:UPI000017441F; GB:M28276
 A:Note: The authors translated the codon TAT for residue 63 as Thr
 C:Comment: Serum albumin is synthesized in the liver as preproalbumin. It binds copper,
 mones (weak bonds with these hormones promote their transfer across the membrane), thy
 C:Genetics:
 A:Introns: 27/1
 C:Superfamily: serum albumin; serum albumin repeat homology
 C:Keywords: carrier protein; duplication; glycoprotein; metal binding; plasma
 F:1-18/Domain: signal sequence #status predicted <SIG>
 F:13-24/Domain: propeptide #status predicted <PRO>
 F:25-607/Product: 74k serum albumin #status predicted <MAT>
 F:32-201/Domain: serum albumin repeat homology <SA1>
 F:220-393/Domain: serum albumin repeat homology <SA2>
 F:412-591/Domain: serum albumin repeat homology <SA3>
 F:30/Binding site: copper (His) #status predicted
 F:80-88,101-117,116-127,147-152,191-200,223-265,268-276,288-302,301-312,339-384,383-392
 F:256/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 35.3%; Score 1207.5; DB 1; Length 607;
 Best Local Similarity 38.5%; Pred. No. 1e-71;
 Matches 232; Conservative 113; Mismatches 243; Indels 15; Gaps 4;

QY 41 SSYLGGQAAKFLTAVLWVGRDA--HKSEVANNRFDLGEENFALVLIAPAOYLQCCPE 97
 D 13 SSFTESR-----ILFKEDTDADHKKHITADVYTLALTEKTFKGLTALIVSQNLKCSLE 64
 QY 98 DRYKLVNTEPKACTVADESANCDKSLHTLFGDKLCTVATLRETYGEWADCCAKOEP 157
 D 65 ELKLVNIEINDFAKSCINDTTPR-CERPVGTLFFDKLCAAPAVGVNVEWSEKCCAKODPE 123
 QY 158 RNECFLOHKKDNDNLPRLVAVPEVDVWCSTAFHNDNETFLKCKLYEIAARRHPYAEELLP 217
 D 124 RAQCFKAKRHNHT--STREPEVETCKLAKENRDDLISFHNBARHNDLYRPAVLAL 180
 QY 218 AKRYKAAFTCCQADKAACLRLKDELREDEGKASSAKRQLKASIQKGERAFKAVAVA 277
 D 181 TKQYHKLAVHCSEBDEKCFSEKMKQIMKQSHSIEBKQNHPCWILLDFPEKVLKALNTLA 240
 QY 278 RLQSRPFAKAPAVYSKLVLDITLVNTECGGDLRECAADRADLAKYICENQDSISKKE 337
 D 241 RVSHRYPKAFKALHNFTFETVTHRIKDCCHDMEFECTSELTSLTENTCOHKDLSISGLK 300
 QY 338 CSEKPLLEKSHCIABVENDEMPADLPISLADLVESKDVCKNYAKAKDVEFLYKFLYEAARR 397
 D 301 CNMPLERKTYCVTLBENDVPRLEISOPITREFPDHVCCKYALANNNEVFLGRIAHAVSRK 360
 QY 398 HPDYSVVLTLRLAKTTEYTLKSCAAADPHECYAKVDFEKPRLVVEPQVLIKONCELP 457
 D 361 HOEISEQFILLQSAKBEVSLNKKCCKTDNPECYKQDAGDRFMBNAKERFALYKONCDIHE 420
 QY 458 LGRYKQNALIVRYTKVPOVSTPTLVESRNLGKVGSKCCNHPKAKRMPCAEDVLSVLT 517
 D 421 HGEYLPENELLIRYTKKMPQVSDETLIGLNAHQADVGENHCQAVPENQRMPCAEGDITLI 480

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Qy 518 NOLCVLHEKTPVSDRVTYKCCCTESTLVNRRPQFSALVDEFTYVPRKFNABTFPHADICTLS 577
Db 481 GKMCEBQKKTFTINNVAHCCTDTSYSGMRSCTFALGPDEDYVPPVTDTEFHFDDKICTAN 540
Qy 578 EKERQIKKQTAALVELYKHKPKATKEQJAKAVMDDPALFAVKECCCKADDKETCPABEGKQVA 637
Db 541 DKPKOHKQKPLVKLIKVSPEKLEKNHIDCSAFLIMVOKCCTPADEHOPCFTEKPVLE 600
Qy 638 ASQ 640
Db 601 HCO 603
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Search completed: April 19, 2006, 12:10:00
Job time : 30.3182 secs

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OM proteain - proteain search, using sw model

Run on: April 19, 2006, 11:57:02 ; Search time 170.412 Seconds
(without alignments)
2670.387 Million cell updates/sec

Title: US-10-775-180-447_COPY_30_674
Perfect score: 3417
Sequence: 1 HEBGRTSDVSSVLEBQAK.....TCPAERGGKLVAAASQALGL 645

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2166443 seqs, 705528306 residues

Total number of hits satisfying chosen parameters: 2166443

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing filter 45 summaries

Database : UniProt_05_80:*
1: uniprot_sprot:*
2: uniprot_tramb1:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3108	91.0	609	1	ALBU_HUMAN
2	3108	91.0	609	2	Q645G4_HUMAN
3	3108	91.0	609	2	Q5NVH5_PONPY
4	3084	90.3	609	2	Q68DN5_HUMAN
5	3073	89.9	609	2	Q56G89_HUMAN
6	3066	89.7	627	2	O5DD07_HUMAN
7	2947	86.2	600	1	ALBU_MACMU
8	2627	76.9	608	1	ALBU_FELCA
9	2574	75.3	608	1	ALBU_CANPA
10	2509	73.4	608	2	Q95VH7_SCHMA
11	2501.5	73.2	607	1	ALBU_EQUAS
12	2481.5	72.3	607	1	ALBU_HORSE
13	2469	72.3	608	2	Q5E6G8_MICFO
14	2462	72.1	608	1	ALBU_RABIT
15	2460	72.0	607	1	Q5EG49_MICFO
16	2455.5	71.9	607	1	ALBU_BOVIN
17	2438	71.3	608	2	OSU3X3_RAT
18	2437.5	71.3	607	1	ALBU_SHEEP
19	2431	71.1	608	1	ALBU_RAT
20	2409.5	70.5	607	1	ALBU_PIG
21	2392	70.0	608	2	Q6WDN3_CAVPO
22	2387.5	69.9	609	1	ALBU_MERIN
23	2383	69.9	608	1	ALBU_MOUSE
24	2383	69.7	608	1	Q546G4_MOUSE
25	2379.5	69.6	583	2	Q6B3Z0_ELBMA
26	2379	69.6	608	2	Q8C7H3_MOUSE
27	2336	68.4	576	2	Q8C7C7_MOUSE
28	1991	58.3	417	2	Q86YGO_HUMAN
29	1870.5	54.7	396	2	Q81UK7_HUMAN
30	1562	45.7	615	1	ALBU_CHICK
31	1295.5	37.9	527	2	Q8G1A5_SHEEP

RESULT 1

ID	ALBU_HUMAN	STANDARD:	PRT:	609 AA.	Q28789 pan troglod
AC	E02768; Q95574; P04277; Q13140; Q6UXK4; Q9P157; Q9P117; Q9UH83;				P02771 homo sapien
AC	Q9UJZ0;				P28050 gorilla gor
DT	21-JUL-1986 (Rel. 01, Created)				Q8MUT5 canis fam1
DT	01-APR-1990 (Rel. 14, Last sequence update)				Q8UW05 amyotoma m
DT	13-SRP-2005 (Rel. 48, Last annotation update)				Q8M176 sus scrofa
DE	Serum albumin precursor.				Q5CZ21_XENTR
GN	Name=ALB;				P14872 xenopus lae
GN	ORFNames=PRO0903, PRO1708, PRO2044, PRO2619, PRO2675, UNQ696/PRO1341.				Q642P7 xenopus lae
OS	Homo sapiens (Human).				P49066 equus caball
OS	Homo sapiens (Human).				Q7E4F3 macrora mon
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;				P84407 gallus gall
OC	Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homiidae;				P08759 xenopus lae
OC	Homo.				Q8UW06 amyotoma l
OX	NCBI_TaxID=9606;				
RN	[1]				
RP	NCBIROTIDE SEQUENCE [GENOMIC DNA].				
RX	MEDLINE=86196112; PubMed=3009475;				
RA	Manghetti P.P., Puffer D.E., Kuang W.J., Dennison O.E., Hawkins J.W.,				
RA	Beattie W.G., Dugaczky A.,				
RT	"Molecular structure of the human albumin gene is revealed by				
RT	nucleotide sequence within q11-22 of chromosome 4.";				
RL	J. Biol. Chem. 261:6747-6757(1986).				
RN	[2]				
RP	NCBIROTIDE SEQUENCE [MRNA], AND VARIANT LYS-420.				
RX	MEDLINE=82081882; PubMed=6171778.				
RA	Lawn R.W., Adelman J., Bock S.C., Franke A.E., Houck C.M.,				
RA	Najarian R.C., Seeburg P.H., Wion K.L.;				
RT	"The sequence of human serum albumin cDNA and its expression in E.				
RT	coli.";				
RL	Nucleic Acids Res. 9:6103-6114(1981).				
RN	[3]				
RP	NCBIROTIDE SEQUENCE [MRNA], AND VARIANT GLY-121.				
RX	MEDLINE=82105994; PubMed=6275391;				
RA	Dugaczky A., Law S.W., Dennison O.E.;				
RT	"Nucleotide sequence and the encoded amino acids of human serum				
RT	albumin mRNA.";				
RL	Proc. Natl. Acad. Sci. U.S.A. 79:71-75(1982).				
RN	[4]				
RP	NCBIROTIDE SEQUENCE [MRNA].				
RC	TISSUE=Liver;				
RA	Yang S., Zhang R.A., Qi Z.W., Yuan Z.Y.;				
RT	"Human serum albumin.";				
RL	Submitted (SRP-1999) to the EMBL/GenBank/DBJ databases.				
RN	[5]				
RP	NCBIROTIDE SEQUENCE [MRNA], AND VARIANT HIROSHIMA-1 LYS-378.				
RA	Huang M.C., Wu H.T.;				
RT	"The cDNA sequences of human serum albumin.";				
RL	Submitted (RNG-2002) to the EMBL/GenBank/DBJ databases.				
RN	[6]				
RP	NCBIROTIDE SEQUENCE [LARGE SCALE MRNA].				
RC	TISSUE=Fetal liver;				
RX	MEDLINE=21376145; PubMed=11483580; DOI=10.1101/gr.175501;				

RA Yu Y., Zhang C., Zhou G., Wu S., Qu X., Wei H., Xing G., Dong C.,
 RA Zhai Y., Wan J., Ouyang S., Li L., Zhang S., Zhou K., Zhang Y., Wu C.,
 RA He F.;
 RT "Gene expression profiling in human fetal liver and identification of
 RT tissue- and developmental-stage-specific genes through complicated
 RT expression profiles and efficient cloning of full-length cDNAs";
 RN Genome Res. 11:1392-1403(2001).
 RL [17]
 RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
 RC TISSUE=Liver, and Skeletal muscle;
 RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Dege J.G., Schuler G.D.,
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Schetz T.E.,
 RA Brownstein M.J., Udell T.B., Toshiyuki S., Carninci P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullany S.J.,
 RA Bosak S.A., McMan P.J., McKernan K.J., Malek J.A., Gunnarathne P.H.,
 RA Richards S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hultyk S.W.,
 RA Vallilou D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Rahy J., Helton E., Ketteman M., Madan A., Rodriguez S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butcherfield Y.S.N., Krzywicki M.I., Skaleka U., Smalins D.E.,
 RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 RL [18]
 RP PROTEIN SEQUENCE OF 25-609.
 RX MEDLINE=76187907; PubMed=1225573; DOI=10.1016/0014-5793(75)80242-0;
 RA Meloun B., Moravek L., Kostka V.;
 RT "Complete amino acid sequence of human serum albumin";
 RL FEBS Lett. 58:134-137(1975).
 RL [19]
 RP PROTEIN SEQUENCE OF 25-609.
 RX Brown J.R., Shockley P., Behrens P.O.;
 RL (In) Bing D.H. (eds.);
 RL The chemistry and physiology of the human plasma proteins, pp.23-40,
 RL Pergamon press, New York (1979).
 RL [10]
 RP NUCLEOTIDE SEQUENCE OF 1-455.
 RC TISSUE=Liver;
 RX Menaya J., Parrilla R., Ayuso M.S.;
 RL Submitted (MAR-1995) to the EMBL/GenBank/DBJ databases.
 RL [11]
 RP NUCLEOTIDE SEQUENCE OF 1-26.
 RX MEDLINE=86140099; PubMed=2419329;
 RA Urano Y., Watanabe K., Sakai M., Tamaoki T.;
 RT "The human albumin gene. Characterization of the 5' and 3' flanking
 RT regions and the polymorphic gene transcripts";
 RL J. Biol. Chem. 261:3244-3251(1986).
 RL [12]
 RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA] OF 1-167.
 RX MEDLINE=22867296; PubMed=12975309; DOI=10.1101/gr.1293003;
 RA Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D.T., Brush J.,
 RA Chen J.F., Chow B., Chui C., Crowley C., Currell B., Deuel B., Dowd P.,
 RA Eaton D., Foster J.S., Grimaldi C., Gu Q., Hass P.E., Heldens S.,
 RA Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J.,
 RA Lewis L., Liao D., Mark M.R., Robbie E., Sanchez C., Schoenfeld J.,
 RA Seshagiri S., Simons L., Singh J., Smith V., Stinson J., Vagts A.,
 RA Vandlen R.L., Watanabe C., Weiland D., Woods K., Xie M.-H.,
 RA Yandura D.G., Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A.D.,
 RA Wood W.I., Godowski P.J., Gray A.M.;
 RT "The secreted protein discovery initiative (SPDI), a large-scale
 RT effort to identify novel human secreted and transmembrane proteins: a
 RT bioinformatics assessment";
 RL Genome Res. 13:2265-2270(2003).
 RL [13]
 RP PROTEIN SEQUENCE OF 222-229.

RX MEDLINE=76257808; PubMed=955075; DOI=10.1016/0014-5793(76)80496-6;
 RA Walker J.E.;
 RT "Lysine residue 199 of human serum albumin is modified by
 RT acetylsalicylic acid.";
 RL FEBS Lett. 66:173-175(1976).
 RL [14]
 RP PROTEIN SEQUENCE OF 25-44 AND 480-499.
 RC TISSUE=Heart;
 RX MEDLINE=95203287; PubMed=7895732;
 RA Corbett J.M., Wheeler C.H., Baker C.S., Yacoub M.H., Dunn M.J.;
 RT "The human myocardial two-dimensional gel protein database: update
 RT 1994";
 RL Electrophoresis 15:1459-1465(1994).
 RL [15]
 RP PROTEIN SEQUENCE OF 166-174.
 RX MEDLINE=86242180; PubMed=3087352;
 RA Mogard M.H., Kobayashi R., Chen C.F., Lee T.D., Reeve J.R., Jr.,
 RA Shively J.E., Walsh J.H.;
 RT "The amino acid sequence of kinetensin, a novel peptide isolated from
 RT peptic-treated human plasma: homology with human serum albumin,
 RT neurotensin and angiotensin.";
 RL Biochem. Biophys. Res. Commun. 136:983-988(1986).
 RL [16]
 RP PROTEIN SEQUENCE OF 166-174.
 RX MEDLINE=87194805; PubMed=2437111;
 RA Cartwright R.E., Mitra S.P., Cochrane D.E.;
 RT "Structure of a biologically active neurotensin-related peptide
 RT obtained from pepsin-treated albumin(s)";
 RL J. Biol. Chem. 262:5968-5973(1987).
 RL [17]
 RP DISULFIDE BONDS.
 RA Sabar M.A., Stockbauer P., Moravek L., Meloun B.;
 RT "Disulfide bonds in human serum albumin";
 RL Collect. Czech. Chem. Commun. 42:564-579(1977).
 RL [18]
 RP BILIRUBIN-BINDING SITE.
 RX MEDLINE=78186630; PubMed=656055;
 RA Jaccobsen C.;
 RT "Lysine residue 240 of human serum albumin is involved in high-
 RT affinity binding of bilirubin";
 RL Biochem. J. 171:453-459(1978).
 RL [19]
 RP VARIANT CANTERBURY ASN-337.
 RX MEDLINE=87157744; PubMed=3828358; DOI=10.1016/0167-4838(87)90088-4;
 RA Brennan S.O., Herbert P.;
 RT "Albumin Canterbury (313 Lys-->Asn). A point mutation in the second
 RT domain of serum albumin";
 RL Biochim. Biophys. Acta 912:191-197(1987).
 RL [20]
 RP VARIANTS NASKAPI/MERSIN GLU-396 AND MEXICO GLY-574.
 RX MEDLINE=87260818; PubMed=3474609;
 RA Takahashi N., Takahashi Y., Blumberg B.S., Putnam F.W.;
 RT "Amino acid substitutions in genetic variants of human serum albumin
 RT and in sequences inferred from molecular cloning";
 RL Proc. Natl. Acad. Sci. U.S.A. 84:4413-4417(1987).
 RL [21]
 RP VARIANTS NAGASAKI-3 GLN-27 YANOMAMA-2 GLU-396; NAGASAKI-2 ASN-399 AND
 RP MAKU GLU-565.
 RX MEDLINE=88068523; PubMed=3479777;
 RA Takahashi N., Takahashi Y., Isobe T., Putnam F.W., Fujita M.,
 RA Satou C., Neal J.V.;
 RT "Amino acid substitutions in inherited albumin variants from
 RT Amerindian and Japanese populations";
 RL Proc. Natl. Acad. Sci. U.S.A. 84:8001-8005(1987).
 RL [22]
 RP VARIANTS FUKUOKA-2 HTS-23; CHRISTCHURCH/HONOLULU-2 GLN-24; TAGLIACOZZO
 RP ASN-537 AND ALBUMIN B/OSAKA-2/PHNOM PHEN LYS-594.
 RX MEDLINE=89098947; PubMed=2911589;
 RA Arai K., Iehioka N., Huse K., Madison J., Putnam F.W.;
 RT "Identical structural changes in inherited albumin variants from
 RT different populations";
 RL Proc. Natl. Acad. Sci. U.S.A. 86:434-438(1989).
 RL [23]

RP VARIANTS HONOLULU-2 GIN-24; NAGASAKI-1 GUY-293; HIROSHIMA-1 LYS-378; RP TOCHIGI LYS-400; HIROSHIMA-2 LYS-406 AND OSAKA-2 LYS-594.

Query Match 91.0%; Score 3108; DB 1; Length 609; Best Local Similarity 100.0%; Pred. No. 1,9e-188; Matches 586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Table with columns: ID, Accession, Description, Score, DB, Length, etc. Includes entries for QY, DB, and OY with various sequence identifiers and scores.

QY 60 RDAHKSEVAFHFDLGEENFKALVLIAPAOYLQCCPEFDHVKLVNEVTEFAKTCVADBSA 119

DB 24 RDAHKSEVAFHFDLGEENFKALVLIAPAOYLQCCPEFDHVKLVNEVTEFAKTCVADBSA 83

Table with columns: ID, Accession, Description, Score, DB, Length, etc. Includes entries for QY, DB, OY, and RESULT 3 with various sequence identifiers and scores.

DR ProDom; PD002486; Serum albumin; 1.
 DR SMART; SM00103; ALBUMIN; 3.
 DR PROSITE; PS00212; ALBUMIN; 3.
 KW Hypothetical protein.
 SQ SEQUENCE 609 AA; 63366 MW; F88FF61DD242E818 CRC64;

Query Match 91.0%; Score 3108; DB 2; Length 609;
 Best Local Similarity 100.0%; Pred. No. 1.9e-188;
 Matches 586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 60 RDAHKEVVAHRRFKDAGEENFKALVLIAPAOYLQCCPFEDHVKLVNEVTEFAKTCVADESA 119
 DB 24 RAAHKEVVAHRRFKDAGEENFKALVLIAPAOYLQCCPFEDHVKLVNEVTEFAKTCVADESA 83
 QY 120 ENCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPENRCEFLQHKDNPMLPRLVRE 179
 DB 84 ENCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPENRCEFLQHKDNPMLPRLVRE 143
 QY 180 VDVMTAFPHDNEETFLKRYLVEIARRHRYFYAPPELLFPAKRYKAAFTBCCQAADKAAACIL 239
 DB 144 VDVMTAFPHDNEETFLKRYLVEIARRHRYFYAPPELLFPAKRYKAAFTBCCQAADKAAACIL 203
 QY 240 PKLDELRLDREGKASAAKQRLKCSLQKFGERRAKAVAVARLSQRFPKAEFAVSKLVTDLT 299
 DB 204 PKLDELRLDREGKASAAKQRLKCSLQKFGERRAKAVAVARLSQRFPKAEFAVSKLVTDLT 263
 QY 300 KYHTCCGHDLLFCADDRADIAKYICENQDSTISSKLCCEKRLKESHCIAREVNDENP 359
 DB 264 KYHTCCGHDLLFCADDRADIAKYICENQDSTISSKLCCEKRLKESHCIAREVNDENP 323
 QY 360 ADLPSLAADFVSKDVKCKNYAABAKDVFGLGMPLYEYARRHDPDYSVLLRLAKTYEFTLTK 419
 DB 324 ADLPSLAADFVSKDVKCKNYAABAKDVFGLGMPLYEYARRHDPDYSVLLRLAKTYEFTLTK 383
 QY 420 CCAAADPHECVAKVDFEFPRLVEEPPONLIKONCELFEOLGEEYKFNALLVRYTKKVPQVS 479
 DB 384 CCAAADPHECVAKVDFEFPRLVEEPPONLIKONCELFEOLGEEYKFNALLVRYTKKVPQVS 443
 QY 480 TPTLVEVSNRLGKVGSKCCGHPBAKRMPCABDYLSVNLQCLVLRHRTFVSDRVTKCTE 539
 DB 444 TPTLVEVSNRLGKVGSKCCGHPBAKRMPCABDYLSVNLQCLVLRHRTFVSDRVTKCTE 503
 QY 540 SLVNRPPCFSSALEVDETVYVPEFNAETFTFHADICTLSEKERQIKKQALVBLVGHKRPKA 599
 DB 504 SLVNRPPCFSSALEVDETVYVPEFNAETFTFHADICTLSEKERQIKKQALVBLVGHKRPKA 563
 QY 600 TRKQLKAVVDDPAAAFVEKCCCKADDKETCPAEBGKKLVAASQAALGI 645
 DB 564 TRKQLKAVVDDPAAAFVEKCCCKADDKETCPAEBGKKLVAASQAALGI 609

RESULT 4
 Q66DN5 HUMAN
 ID Q66DN5 HUMAN PRELIMINARY; PRT; 609 AA.
 AC Q66DN5;
 DT 25-OCT-2004 (TrEMBLrel. 28, Created)
 DT 25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
 DT 25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
 DE Hypothetical protein DKFZp779N1935.
 GN Name=DKFZp779N1935;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homiidae;
 OC Homo.
 OX NCBI_TaxID=9606;
 RN NP_056689.1
 RC TISSUE=Liver;
 RG The German cDNA Consortium;
 RA Bloeker H., Becher M., Brandt P., Mewes H.W., Weil B., Amid C.,
 RA Osanger A., Rodo G., Han M., Wilmann S.;
 RA Submitted (Aug-2004) to the EMBL/GenBank/DBJ databases.
 DR EMBL; CR749331; CAH18185.1; -; mRNA.

DR SMR; Q66DN5; 26-608.
 DR GO; GO:0005615; C:extracellular space; IEA.
 DR GO; GO:0005386; F:carrier activity; IEA.
 DR GO; GO:0006810; P:transport; IEA.
 DR InterPro; IPR001703; AlphaFetoproc.
 DR InterPro; IPR000264; Serum albumin.
 DR Pfam; PF02773; Serum albumin; 3.
 DR PRINTS; PR00803; AFETOPROTEIN.
 DR PRINTS; PR00802; SERUMALBUMIN.
 DR ProDom; PD002486; Serum albumin; 1.
 DR SMART; SM00103; ALBUMIN; 3.
 DR PROSITE; PS00212; ALBUMIN; 3.
 KW Hypothetical protein.
 SQ SEQUENCE 609 AA; 69402 MW; 3BA3AF17BF99E94 CRC64;

Query Match 90.3%; Score 3084; DB 2; Length 609;
 Best Local Similarity 99.1%; Pred. No. 6.2e-187;
 Matches 581; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 60 RDAHKEVVAHRRFKDAGEENFKALVLIAPAOYLQCCPFEDHVKLVNEVTEFAKTCVADESA 119
 DB 24 RAAHKEVVAHRRFKDAGEENFKALVLIAPAOYLQCCPFEDHVKLVNEVTEFAKTCVADESA 83
 QY 120 ENCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPENRCEFLQHKDNPMLPRLVRE 179
 DB 84 ENCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPENRCEFLQHKDNPMLPRLVRE 143
 QY 180 VDVMTAFPHDNEETFLKRYLVEIARRHRYFYAPPELLFPAKRYKAAFTBCCQAADKAAACIL 239
 DB 144 VDVMTAFPHDNEETFLKRYLVEIARRHRYFYAPPELLFPAKRYKAAFTBCCQAADKAAACIL 203
 QY 240 PKLDELRLDREGKASAAKQRLKCSLQKFGERRAKAVAVARLSQRFPKAEFAVSKLVTDLT 299
 DB 204 PKLDELRLDREGKASAAKQRLKCSLQKFGERRAKAVAVARLSQRFPKAEFAVSKLVTDLT 263
 QY 300 KYHTCCGHDLLFCADDRADIAKYICENQDSTISSKLCCEKRLKESHCIAREVNDENP 359
 DB 264 KYHTCCGHDLLFCADDRADIAKYICENQDSTISSKLCCEKRLKESHCIAREVNDENP 323
 QY 360 ADLPSLAADFVSKDVKCKNYAABAKDVFGLGMPLYEYARRHDPDYSVLLRLAKTYEFTLTK 419
 DB 324 ADLPSLAADFVSKDVKCKNYAABAKDVFGLGMPLYEYARRHDPDYSVLLRLAKTYEFTLTK 383
 QY 420 CCAAADPHECVAKVDFEFPRLVEEPPONLIKONCELFEOLGEEYKFNALLVRYTKKVPQVS 479
 DB 384 CCAAADPHECVAKVDFEFPRLVEEPPONLIKONCELFEOLGEEYKFNALLVRYTKKVPQVS 443
 QY 480 TPTLVEVSNRLGKVGSKCCGHPBAKRMPCABDYLSVNLQCLVLRHRTFVSDRVTKCTE 539
 DB 444 TPTLVEVSNRLGKVGSKCCGHPBAKRMPCABDYLSVNLQCLVLRHRTFVSDRVTKCTE 503
 QY 540 SLVNRPPCFSSALEVDETVYVPEFNAETFTFHADICTLSEKERQIKKQALVBLVGHKRPKA 599
 DB 504 SLVNRPPCFSSALEVDETVYVPEFNAETFTFHADICTLSEKERQIKKQALVBLVGHKRPKA 563
 QY 600 TRKQLKAVVDDPAAAFVEKCCCKADDKETCPAEBGKKLVAASQAALGI 645
 DB 564 TRKQLKAVVDDPAAAFVEKCCCKADDKETCPAEBGKKLVAASQAALGI 609

RESULT 5
 Q56G89 HUMAN
 ID Q56G89 HUMAN PRELIMINARY; PRT; 609 AA.
 AC Q56G89;
 DT 10-MAY-2005 (TrEMBLrel. 30, Created)
 DT 10-MAY-2005 (TrEMBLrel. 30, Last sequence update)
 DT 10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
 DE Serum albumin.
 GN Homo sapiens (Human).
 OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homiidae;
 OC Homo.
 OX NCBI_TaxID=9606;
 RN NP_056689.1

[1]
 NUCLEOTIDE SEQUENCE.
 RP HU462101.1
 RA Li H., Zhang Y., Li X., Yang R., Tang S., Zhang M., Hua S.:
 RT "Homo sapiens serum albumin (HSA) cDNA sequence."
 RL Submitted (MAR-2005) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AY60291; AAX63425.1; -; mRNA.
 SQ SEQUENCE 609 AA; 69084 MW; 39B0CB81217A99C CRC64;

Query Match 89.9%; Score 3073; DB 2; Length 609;
 Best Local Similarity 99.1%; Pred. No. 3,1e-186;
 Matches 581; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY	60	RDAAKSEVARRFPDLDGSENFKALVLIAPAOYLQCCPEPDHVKLVNVEYTPAKTCVADESA	119
DB	24	RDAAKSEVARRFPDLDGSENFKALVLIAPAOYLQCCPEPDHVKLVNVEYTPAKTCVADESA	83
QY	120	ENCDKSIHTLFGDKLCTVATLRETYGEMADCCAKQBERRECFLOHKDDPNLPRLVRE	179
DB	84	ENCDKSIHTLFGDKLCTVATLRETYGEMADCCAKQBERRECFLOHKDDPNLPRLVRE	143
QY	180	VDVWCTAFHNDNEETFLKCYLYEIRARRHPYYPAPLFPAPKRYKAAPTECCOAAADKAA	239
DB	144	VDVWCTAFHNDNEETFLKCYLYEIRARRHPYYPAPLFPAPKRYKAAPTECCOAAADKAA	203
QY	240	PKLDELREDEKASAKQRLKCSLQKFGERAFAKMAVARLSORPPKAEPAVSKLVTDLT	299
DB	204	PKLDELREDEKASAKQRLKCSLQKFGERAFAKMAVARLSORPPKAEPAVSKLVTDLT	263
QY	300	KVHTCECHGDLLECCADRDADLAKYICENODSISSEKLEKCEKPLLEKSHCIAEVENDEMP	359
DB	264	KVHTCECHGDLLECCADRDADLAKYICENODSISSEKLEKCEKPLLEKSHCIAEVENDEMP	323
QY	360	ADLPSLAADRVESKDVCKNYAAEAKDVFLEGMFLYEARRRHPDYSVLLLRILAKTYETLLEK	419
DB	324	ADLPSLAADRVESKDVCKNYAAEAKDVFLEGMFLYEARRRHPDYSVLLLRILAKTYETLLEK	383
QY	420	CCAADPHCEYAKVDFEPRKPLVEBPQNLKONCELFQDLGKYKONMLLVRYTKKVPQVS	479
DB	384	CCAADPHCEYAKVDFEPRKPLVEBPQNLKONCELFQDLGKYKONMLLVRYTKKVPQVS	443
QY	480	TPTLVESRNILGKYGSKCKCHPBAKRMPCAEVDYLSVLANQLCVLHEKTPVSDRVTKCTE	539
DB	444	TPTLVESRNILGKYGSKCKCHPBAKRMPCAEVDYLSVLANQLCVLHEKTPVSDRVTKCTE	503
QY	540	SLVNRRCFSALEVDYEVYVPEKFNAAETPTFHADICTLSEKEROIKKQOTALVELVYKHPKA	599
DB	504	SLVNRRCFSALEVDYEVYVPEKFNAAETPTFHADICTLSEKEROIKKQOTALVELVYKHPKA	563
QY	600	TKBQLKAVMDPFAAFVVEKCKKADDKETCFABEGKGLVAASQAALGL	645
DB	564	TKBQLKAVMDPFAAFVVEKCKKADDKETCFABEGKGLVAASQAALGL	609

RESULT 7 HUMAN
 QSD0D7_HUMAN PRETTY 627 AA.

QY	60	RDAAKSEVARRFPDLDGSENFKALVLIAPAOYLQCCPEPDHVKLVNVEYTPAKTCVADESA	119
DB	24	RDAAKSEVARRFPDLDGSENFKALVLIAPAOYLQCCPEPDHVKLVNVEYTPAKTCVADESA	83
QY	120	ENCDKSIHTLFGDKLCTVATLRETYGEMADCCAKQBERRECFLOHKDDPNLPRLVRE	179
DB	84	ENCDKSIHTLFGDKLCTVATLRETYGEMADCCAKQBERRECFLOHKDDPNLPRLVRE	143
QY	180	VDVWCTAFHNDNEETFLKCYLYEIRARRHPYYPAPLFPAPKRYKAAPTECCOAAADKAA	239
DB	144	VDVWCTAFHNDNEETFLKCYLYEIRARRHPYYPAPLFPAPKRYKAAPTECCOAAADKAA	203
QY	240	PKLDELREDEKASAKQRLKCSLQKFGERAFAKMAVARLSORPPKAEPAVSKLVTDLT	299
DB	204	PKLDELREDEKASAKQRLKCSLQKFGERAFAKMAVARLSORPPKAEPAVSKLVTDLT	263
QY	300	KVHTCECHGDLLECCADRDADLAKYICENODSISSEKLEKCEKPLLEKSHCIAEVENDEMP	359
DB	264	KVHTCECHGDLLECCADRDADLAKYICENODSISSEKLEKCEKPLLEKSHCIAEVENDEMP	323
QY	360	ADLPSLAADRVESKDVCKNYAAEAKDVFLEGMFLYEARRRHPDYSVLLLRILAKTYETLLEK	419
DB	324	ADLPSLAADRVESKDVCKNYAAEAKDVFLEGMFLYEARRRHPDYSVLLLRILAKTYETLLEK	383
QY	420	CCAADPHCEYAKVDFEPRKPLVEBPQNLKONCELFQDLGKYKONMLLVRYTKKVPQVS	479
DB	384	CCAADPHCEYAKVDFEPRKPLVEBPQNLKONCELFQDLGKYKONMLLVRYTKKVPQVS	443
QY	480	TPTLVESRNILGKYGSKCKCHPBAKRMPCAEVDYLSVLANQLCVLHEKTPVSDRVTKCTE	539
DB	444	TPTLVESRNILGKYGSKCKCHPBAKRMPCAEVDYLSVLANQLCVLHEKTPVSDRVTKCTE	503
QY	540	SLVNRRCFSALEVDYEVYVPEKFNAAETPTFHADICTLSEKEROIKKQOTALVELVYKHPKA	599
DB	504	SLVNRRCFSALEVDYEVYVPEKFNAAETPTFHADICTLSEKEROIKKQOTALVELVYKHPKA	563
QY	600	TKBQLKAVMDPFAAFVVEKCKKADDKETCFABEGKGLVAASQAALGL	645
DB	564	TKBQLKAVMDPFAAFVVEKCKKADDKETCFABEGKGLVAASQAALGL	609

RESULT 7 ALBU_MACMU STANDARD; PRETTY 600 AA.

AC Q28522; 01-NOV-1997 (Rel. 35, Created)

DT 01-NOV-1997 (Rel. 35, Last sequence update)

DT 10-MAY-2005 (Rel. 47, Last annotation update)

DE Serum albumin precursor (Fragment).

GN Name:ALB; Macaca mullatta (Rhesus macaque).

OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;

OC Cercopithecoidea; Cercopithecinae; Macaca.

OX NCBI_TaxID=9544;

RN [1]

RP NUCLEOTIDE SEQUENCE.

RA MEDLINE=93211971; PubMed=8460152;

RA Watkins S.A., Sakamoto Y., Madison J.M., Davis B.M., Smith D.G.,

RA Daulton J., Putnam F.W.;

RT "cdna and protein sequence of polymorphic macaque albumins that differ

RT in bilirubin binding.";

RL Proc. Natl. Acad. Sci. U.S.A. 90:2409-2413 (1993).

CC -1- FUNCTION: Serum albumin, the main protein of plasma, has a good

CC binding capacity for water, Ca(2+), Na(+), K(+), fatty acids,

CC hormones, bilirubin and drugs. Its main function is the regulation

CC of the colloidal osmotic pressure of blood.

CC -1- SUBCELLULAR LOCATION: Secreted.

CC -1- TISSUE SPECIFICITY: Plasma.

CC -1- SIMILARITY: Contains 3 albumin domains.

CC -----

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CC removed.

CC

DR EMBL: M90463; AAA36906.1; -; mRNA.

DR PIR: A47391; A47391..

DR HSSP: P02768; 1E7B.

DR SMR: Q28522; 19-600.

DR InterPro: IPR001703; Alphafetoprot.

DR Pfam: IPR000264; Serum albumin.

DR DR Pfam0273; Serum albumin; 3.

DR PRINTS; PR00803; AETOPROTEIN.

DR PRINTS; PR00802; SERUMALBUMIN.

DR ProDom; PD002486; Serum albumin; 1.

DR SMART; SM00103; ALBUMIN; 3.

DR PROSITE; PS00212; ALBUMIN; 3.

KW Copper; Lipid-binding; Metal-binding; Repeat; Signal.

FT SIGNAL 10

FT PROPEP 11

FT CHAIN 17 600

FT DOMAIN 17 197

FT DOMAIN 204 389

FT DOMAIN 396 587

FT METAL 19 19

FT BINDING 256 256

FT DISULFID 69 78

FT DISULFID 91 107

FT DISULFID 106 117

FT DISULFID 140 185

FT DISULFID 184 193

FT DISULFID 216 262

FT DISULFID 261 269

FT DISULFID 281 295

FT DISULFID 294 305

FT DISULFID 332 377

FT DISULFID 376 385

FT DISULFID 408 454

FT DISULFID 453 464

FT DISULFID 477 493

FT DISULFID 492 503

FT DISULFID 530 575

FT DISULFID 574 583

FT NON_TER 1

SQ SEQUENCE 600 AA; 67881 MW; E45C871A670F740B CRC64;

Query Match 86.2%; Score 2947; DB 1; Length 600;

Best Local Similarity 93.5%; Pred. No. 2,9e-178;

Matches 546; Conservative 23; Mismatches 15; Indels 0; Gaps 0;

QY 60 RPAHSEVVAHRRPKDLEGENFKALVLIAPFNOYLQCCPEPBNVYLVNVEPFAATCVADSESA 119

DB 16 RPHHSEVVAHRRPKDLEGENFKALVLIAPFNOYLQCCPEPBNVYLVNVEPFAATCVADSESA 75

QY 120 ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOPEPNEEFLQHKDNDPMLPRLVRE 179

DB 76 ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOPEPNEEFLQHKDNDPMLPRLVRE 135

QY 180 VDMCTAFPHDNBETFLKXLYEIRRHPPYFYPABELLFFAKRYKAAPTECCQAADKAACTL 239

DB 136 VDMCTAFPHDNBETFLKXLYEIRRHPPYFYPABELLFFAKRYKAAPTECCQAADKAACTL 195

QY 240 PKLDELKRDGKASSAKQRIKCAASLQKFGERRAKRANVAALISQRPKAEFAVSKLVTDLT 299

DB 196 PKLDELKRDGKASSAKQRIKCAASLQKFGERRAKRANVAALISQRPKAEFAVSKLVTDLT 255

QY 300 KYHTECCGGDLLECADDRADLAKYICENODSISSKLKECCERKPILEKSHCIAEVENDEMP 359

DB 256 KYHTECCGGDLLECADDRADLAKYICENODSISSKLKECCERKPILEKSHCIAEVENDEMP 315

QY 360 ADLPSTAADFVSKDVCXKXVYAAKADVFLGMPFYEARRRHDPYSVLLRLIAKTYETLTK 419

DB 316 ADLPSTAADFVSKDVCXKXVYAAKADVFLGMPFYEARRRHDPYSVLLRLIAKTYETLTK 375

QY 420 CCNAADPHHCYAKVPEPPEKLYVEEPONLTKONCELEPEQGEYKFNALLVRYTKKVPQVS 479

DB 376 CCNAADPHHCYAKVPEPPEKLYVEEPONLTKONCELEPEQGEYKFNALLVRYTKKVPQVS 435

QY 480 TPTLVEVSRNLGKVGSKCCCKHPBAKMPCAEDYLTVLNLQCLVLEKTPVSDRVTKCTTE 539

DB 436 TPTLVEVSRNLGKVGSKCCCKHPBAKMPCAEDYLTVLNLQCLVLEKTPVSDRVTKCTTE 495

QY 540 SLVNRPRFGSALAEVDETVYVPEPNAETFTFHADICTLSEKEROIKKQYALVLYKAKPKVA 599

DB 496 SLVNRPRFGSALAEVDETVYVPEPNAETFTFHADICTLSEKEROIKKQYALVLYKAKPKVA 555

QY 600 TKEQLKAVDDPRAAPYKCKCKADDKETCPAEEGKULVAASQAL 643

DB 556 TKEQLKAVDDPRAAPYKCKCKADDKETCPAEEGKULVAASQAL 599

RESULT 8

ALBU_FELCA STANDARD; PRT; 608 AA.

AC P49064; Q7YSG3; DT 01-FEB-1996 (Rel. 33, Created)

DT 01-FEB-1996 (Rel. 33, Last sequence update)

DT 10-MAY-2005 (Rel. 47, Last annotation update)

DE Serum albumin precursor (Allergen Fel d 2).

GN Name=ALB; Felis silvestris catus (Cat).

OS Felis silvestris catus (Cat).

OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Laurasiatheria; Carnivora; Fissipedia; Felidae;

OC Felinae; Felis;

OX NCBI_TaxID=9685;

RN [1]

RP NUCLEOTIDE SEQUENCE.

RA MEDLINE=96194824; PubMed=8647469; DOI=10.1016/0378-1119(95)00851-9;

RA Hilger C., Gridioni F., Kohlen M., Hentges F.;

RT "Sequence of the gene encoding cat (Felis domesticus) serum albumin.";

RL Gene 169:295-296 (1996).

RN NUCLEOTIDE SEQUENCE OF 25-608.

RP TISSUE=Liver;

RA Reininger R., Swoboda I., Bohle B., Hauswirth A.W., Valent P.,

RA Rumpold H., Valenta R., Spitzauer S.;

RT "Escherichia coli expression and purification of recombinant cat

albumin: Igb recognition, induction of basophil activation and
 RT Lymphoproliferative responses in atopic patients."
 RL Submitted (MAR-2002) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: Serum albumin, the main protein of plasma, has a good
 CC binding capacity for water, Ca(2+), Na(+), K(+), fatty acids,
 CC hormones, bilirubin and drugs. Its main function is the regulation
 CC of the colloidal osmotic pressure of blood.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: Plasma.
 CC -1- ALLELGEN: Causes an allergic reaction in human.
 CC -1- SIMILARITY: Belongs to the ALB/AP/VDB family.
 CC -1- SIMILARITY: Contains 3 albumin domains.
 CC -----
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 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use as long as its content is in no way modified and this statement is not
 CC removed.

DR EMBL: X94842; CA59279.1; -; mRNA.
 DR EMBL: AJ487677; CAD32275.1; -; mRNA.
 DR PIR: JC4660; S57632.
 DR HSSP: P02768; 1B7B.
 DR SMR: P49064; 26-608.
 DR InterPro: IPR001703; Alphafetoprot.
 DR InterPro: IPR000264; Serum albumin.
 DR Pfam: PF00273; Serum_albumin_3.
 DR PRINTS: PR00803; AFTOPROTEIN.
 DR PRINTS: PD00802; SERUMALBUMIN.
 DR ProDom: PD002486; Serum_albumin.
 DR SMART: SM00103; ALBUMIN; 3.
 DR PROSITE: PS00212; ALBUMIN; 3.
 KW Allergen; Copper; Lipid-binding; Metal-binding; Repeat; Signal.
 FT PROPEP 1 18
 FT CHAIN 19 24 By similarity.
 FT DOMAIN 25 608 Serum albumin.
 FT DOMAIN 25 205 Albumin 1.
 FT DOMAIN 212 397 Albumin 2.
 FT DOMAIN 404 595 Albumin 3.
 FT METAL 27 27 Copper.
 FT DISULFID 77 86 By similarity.
 FT DISULFID 99 115 By similarity.
 FT DISULFID 114 125 By similarity.
 FT DISULFID 148 193 By similarity.
 FT DISULFID 192 201 By similarity.
 FT DISULFID 224 270 By similarity.
 FT DISULFID 269 277 By similarity.
 FT DISULFID 289 303 By similarity.
 FT DISULFID 302 313 By similarity.
 FT DISULFID 340 385 By similarity.
 FT DISULFID 384 393 By similarity.
 FT DISULFID 416 462 By similarity.
 FT DISULFID 461 472 By similarity.
 FT DISULFID 485 501 By similarity.
 FT DISULFID 500 511 By similarity.
 FT DISULFID 538 583 By similarity.
 FT DISULFID 582 591 By similarity.
 FT CONFLICT 94 94 L -> N (in Ref. 2).
 FT CONFLICT 186 186 L -> F (in Ref. 2).
 FT CONFLICT 251 251 K -> R (in Ref. 2).
 FT CONFLICT 282 282 E -> D (in Ref. 2).
 FT CONFLICT 331 331 A -> E (in Ref. 2).
 FT CONFLICT 331 331 V -> A (in Ref. 2).
 SQ SRQUNCE 608 AA; 68659 MW; 07EG629CAC5F60E5F CRC64;

Query Match 76.9%; Score 2627; DB 1; Length 608;
 Best Local Similarity 80.1%; Pred. No. 5.4e-158;
 Matches 483; Conservative 53; Mismatches 57; Indels 10; Gaps 1;

QY 41 SSVLEGGAAKVFAMLVKGRDPAKSEVAHAFKDIAGEENFKALVLIAPAQYIQCCPFEDHV 100
 DB 15 SAYSRG-----VTRRAHQSEIARHFNDDIGBEHFRLGLVIVAFSQTQQCFPHDHV 64

QY 101 KLVNEVTEFAKTCVADESAENCDKSHHTLFGDKLCTVAATLRETYGMADCCAKQEPERRNE 160
 DB 65 KLVNEVTEFAKGVADQSAANCEKSLHEHLLGDQLCTVASLRDYYGMADCCCKEKEPERNE 124
 QY 161 CFIQHDDNDPMLPRLVREPVDDVDCFRPHNEEFTLKKYIYETARHHPYAPPELLFPARR 220
 DB 125 CFIQHDDNDPFGQLTVPADAMCTAFHENEQFELKRYIETARRHPYAPPELLFYAAB 184
 QY 221 YKAAFTTECCOAAADKACALPKLDELREDEGKASSAKORLTKASIQKGEBAFPAKMAVAARLS 280
 DB 185 YKAVFTTECCOAAADKACALPKLDELREDEGKASSAKORLTKASIQKGEBAFPAKMAVAARLS 244
 QY 281 QRPKAEFAEAVSKLVTDLTKVHTCCGDLLECCADRADLAKYICENQDISISKLEKCE 340
 DB 245 QRPKAEFAEAVSKLVTDLTKVHTCCGDLLECCADRADLAKYICENQDISISKLEKCE 304
 QY 341 KPLLEKSHCIAYEVDMPADLPSLAADVYESKDVCKAVYEAQKDVFLGMFLYEXARRHD 400
 DB 305 KPLLEKSHCIAYEVDMPADLPSLAADVYESKDVCKAVYEAQKDVFLGMFLYEXARRHD 364
 QY 401 YSVVLLRLAKTYETTLLEKCCAAADPHECAKAVFDEKPLVEERPOLIKONCELPQOLGE 460
 DB 365 YSVVLLRLAKTYETTLLEKCCAAADPHECAKAVFDEKPLVEERPOLIKONCELPQOLGE 424
 QY 461 YKFNALLVRYTKKVPQVSTPPLVVEVSRNIGKVSCKCKRPEAKRMPCAEDYLSVVLNQL 520
 DB 425 YGFQNALVRYTKKVPQVSTPPLVVEVSRNIGKVSCKCKRPEAKRMPCAEDYLSVVLNRL 484
 QY 521 CVLHEKTPVSDRYTKKCTSSLVNRRPCFSALEVDETYVYKPEPALEFPTTHADICTLSEBE 580
 DB 485 CVLHEKTPVSDRYTKKCTSSLVNRRPCFSALEVDETYVYKPEPALEFPTTHADICTLSEBE 544
 QY 581 ROIKKOTAVELVYKHKPKATYKBOLEKAVMDPFAAFVCEKCKADDKETCFPAEKGKLVAAASQ 640
 DB 545 ROIKKOTAVELVYKHKPKATYKBOLEKAVMDPFAAFVCEKCKADDKETCFPAEKGKLVAAASQ 604
 QY 641 AAL 643
 DB 605 AAL 607

RESULT 9
 ID ALBU CANFA STANDARD; PRT; 608 AA.
 AC P49822; O77705; Q9TSZ4;
 DT 01-OCT-1996 (Rel. 34, Created)
 DT 01-FEB-2005 (Rel. 46, Last sequence update)
 DT 10-MAY-2005 (Rel. 47, Last annotation update)
 DE Serum albumin precursor (Allergen Can f 3).
 OS Name=Alb;
 GN Canis familiaris (Dog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Laurasiatheria; Carnivora; Fissipedia; Canidae;
 OC Canis.
 OX NCBI_TaxID=9615;
 RN [1]
 RP NUCLEOTIDE SEQUENCE [MRNA].
 RC STRAIN=Beagle; TISSUE=Liver;
 RA Hilger C.; Submitted (MAR-1999) to the EMBL/GenBank/DBJ databases.
 RL [2]
 RP NUCLEOTIDE SEQUENCE.
 RC TISSUE=Liver;
 RA MBDLINE=20148667; PubMed=10669848; DOI=10.1016/S0091-6749(00)90077-0;
 RA Pandjaitan B., Swoboda I., Brandjesky-Pichler F., Rumpold H.,
 RA Valenta R., Spitzauer S.;
 RT "Escherichia coli expression and purification of recombinant dog
 RT albumin, a cross-reactive animal allergen."
 RL J Allergy Clin. Immunol. 105:279-285(2000).
 RN [3]
 RP NUCLEOTIDE SEQUENCE [MRNA].
 RC STRAIN=Beagle; TISSUE=Liver;
 RA Miyake M., Okazaki M., Iwabuchi S.;

RT "Isolation of a cDNA encoding canine serum albumin." ;
 RL Submitted (Aug-2002) to the EMBL/GenBank/DBJ databases.
 RN [4]
 RP PROTEIN SEQUENCE OF 25-48.
 RX MEDLINE=75011422; Pubmed=4414013;
 RA Dixon J.W., Sarkar B. ;
 RT "Isolation, amino acid sequence and copper (II) -binding properties of
 peptide (1-24) of dog serum albumin." ;
 RL J. Biol. Chem. 249:5872-5877(1974).
 RN [5]
 RP PROTEIN SEQUENCE OF 25-38.
 RC TISSUE=Heart ;
 RX MEDLINE=98163340; Pubmed=9504812 ;
 RA Dunn M.J., Corbett J.M., Wheeler C.H. ;
 RT "HSC-2D PAGE and the two-dimensional gel electrophoresis database of
 dog heart proteins." ;
 RL Electrophoresis 18:2795-2802(1997).
 RN [6]
 RP NUCLEOTIDE SEQUENCE OF 215-478.
 RC TISSUE=Salivary gland ;
 RX MEDLINE=94201492; Pubmed=7512102 ;
 RA Spitzauer S., Schneider C., Sperr W.R., Pandjaitan B., Valent P.,
 Moehl S., Bener C., Schneider O., Krafc D., Rumpold H. ;
 RT "Molecular characterization of dog albumin as a cross-reactive
 allergen." ;
 RL J. Allergy Clin. Immunol. 93:614-627(1994).
 CC -1- FUNCTION: Serum albumin, the main protein of plasma, has a good
 binding capacity for water, Ca(2+), Mg(+), K(+), fatty acids,
 hormones, bilirubin and drugs. Its main function is the regulation
 of the colloidal osmotic pressure of blood.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: Plasma.
 CC -1- ALLELGEN: Causes an allergic reaction in human.
 CC -1- SIMILARITY: Belongs to the Alb/AFPI/Ypds family.
 CC -1- SIMILARITY: Contains 3 albumin domains.
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 CC
 DR EMBL: AJ133489; CAB64867.1; -; mRNA.
 DR EMBL: Y17737; CAAT6841.1; -; mRNA.
 DR EMBL: AB090854; BA010663.1; -; mRNA.
 DR EMBL: S72946; AAB30434.1; -; mRNA.
 DR HSSP: P02768; 1E7B.
 DR SMR: P49822; 26-607.
 DR HSC-2DPAGE: P49822; DOG.
 DR InterPro: ENSCARG0000003016; Canis familiaris.
 DR InterPro: IPR000264; Serum albumin.
 DR Pfam: PR00273; Serum albumin.
 DR PRINTS: PR00802; SERUMALBUMIN.
 DR ProDom: PD002486; Serum albumin; 1.
 DR SMART: SM00103; ALBUMIN; 3.
 DR PROSITE: PS00212; ALBUMIN; 3.
 KW Allergen; Copper; Direct protein sequencing; Lipid-binding;
 KW Metal-binding; Repeat; Signal.
 FT SIGNAL 1 18 Potential.
 FT PROPEP 19 24 Serum albumin.
 FT CHAIN 25 608 Albumin 1.
 FT DOMAIN 25 205 Albumin 1.
 FT DOMAIN 212 397 Albumin 2.
 FT DOMAIN 404 595 Albumin 3.
 FT METAL 27 27 Copper (By similarity).
 FT DISULFID 77 86 By similarity.
 FT DISULFID 99 115 By similarity.
 FT DISULFID 114 125 By similarity.
 FT DISULFID 148 193 By similarity.
 FT DISULFID 192 201 By similarity.
 FT DISULFID 224 270 By similarity.
 FT DISULFID 269 277 By similarity.
 FT DISULFID 289 303 By similarity.

FT DISULFID 302 313 By similarity.
 FT DISULFID 340 385 By similarity.
 FT DISULFID 384 393 By similarity.
 FT DISULFID 416 462 By similarity.
 FT DISULFID 461 472 By similarity.
 FT DISULFID 485 501 By similarity.
 FT DISULFID 500 511 By similarity.
 FT DISULFID 538 583 By similarity.
 FT DISULFID 582 591 By similarity.
 FT CONFLICT 1 26 MKVVFISLIFLFSAYSAYKGLVRRRA -> MDT (in Ref. 2).
 FT CONFLICT 146 146 A -> R (in Ref. 2).
 FT CONFLICT 206 206 I -> T (in Ref. 2).
 FT CONFLICT 349 349 V -> A (in Ref. 2).
 FT CONFLICT 359 359 A -> S (in Ref. 2 and 6).
 FT CONFLICT 448 448 V -> VV (in Ref. 6).
 FT CONFLICT 474 474 E -> D (in Ref. 2 and 6).
 FT CONFLICT 474 474 E -> D (in Ref. 2 and 6).
 SQ SEQUENCE 608 AA; 68605 MW; 3DB012PFF7979CF3 CRC64;
 Query Match 75.3%; Score 2574; DB 1; Length 608;
 Best Local Similarity 78.4%; Pred. No. 1.2e-154;
 Matches 473; Conservative 57; Mismatches 63; Indels 10; Gaps 2;
 QY 41 SQTLSGQAAKERIAMLVYKGRDANKSEVARRFQDLSGSEPKALVLLAFAGYLLQCCPEPDHY 100
 DB 15 SAYSRG-----LVR-REAYKSEIARRVYNDLSEBHRGLVAVFSYLLQCCPEPDHY 64
 QY 101 KLVNEVTEPAKCVADESLENQDKSLHTLFGDKLCTVATLRETYGEMADCCAKOPEERNE 160
 DB 65 KLAKEVTEPAKCAABESGANCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOPEERNE 124
 QY 161 CFLQHKDNDPNI.PRLVPRPVDVCTA.FHNDSEFTLKKYLYETARRHPYVYAPPELL.FPAKR 220
 DB 125 CFLAHDNDPGRPPVAVRPPDALCAAFQDNEQLFGKLYLYETARRHPYVYAPPELLYYAQ 184
 QY 221 YKAAPTECCQAADKAACILPKDELDRDEKASASAKORLKCASLQKGRBAPFAMVAVRLS 280
 DB 185 YKGVFPECCQAADKAACILPKDELDRDEKASASAKORLKCASLQKGRBAPFAMVAVRLS 244
 QY 281 QRPKAEPAVSEKLVTDLTKVHTTECCGDLTECADDRADIARYIENODSISSKLKECCE 340
 DB 245 QRPKADPAEISKLVTDLTKVHTTECCGDLTECADDRADIARYIENODSISSKLKECCE 304
 QY 341 KPLLEKSHCIAVENDMPADL.PSLAADPVESEKDVCKNYAKADYFLGMPLYEYARRHPD 400
 DB 305 KPLLEKSHCIAVENDMPADL.PSLAADPVESEKDVCKNYAKADYFLGMPLYEYARRHPD 364
 QY 401 YGVAVLLRLAKTYETTLTEKCCAAADPHBEGYAVVPEFRKLVBEPPNLIKONCELPEPLAGE 460
 DB 365 YGVAVLLRLAKTYEATLTKKCCATDPTCYAVLVDFKFLVDPQVLTNGBELFEKLEGE 424
 QY 461 YKQNALVRYTKRVQVSTPTLIVSESRNIGKVGSKCKGHPAKRMPCAEDYLSVVLNQL 520
 DB 425 YKQNALVRYTKRVQVSTPTLIVSESRNIGKVGSKCKGHPAKRMPCAEDYLSVVLNQL 484
 QY 521 CVLHEKTPVSDRVTKCSTESLVNRRPCEFSALBVDDETYVPEKFNAAFTFTHADLCTLSEK 580
 DB 485 CVLHEKTPVSDRVTKCSTESLVNRRPCEFSALBVDDETYVPEKFNAAFTFTHADLCTLSEK 544
 QY 581 RQIKKQTALVELYKHKPKATKQDKRVMDDPAAFAPEKCCAKADKTECPAEBKKLVAAASO 640
 DB 545 RQIKKQTALVELYKHKPKATKQDKRVMDDPAAFAPEKCCAKADKTECPAEBKKLVAAASO 604
 QY 641 AAL 643
 DB 605 AAL 607
 RESULT 10
 095VB7 SCHMA
 ID 095VB7 SCHMA PRELIMINARY; PRT; 608 AA.
 AC 095VB7
 DT 01-DEC-2001 (TEMBLrel. 19, Created)

01-DEC-2001 (TREMBl:rel. 19, Last sequence update)
 DT .01-MAR-2004 (TREMBl:rel. 26, Last annotation update)
 DE Albumin.
 OS Schistosoma mansoni (Blood fluke).
 OC Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea; Strigeiida;
 CC Schistosomatidae; Schistosomatidae; Schistosoma.
 NX NCBI_TaxID=6183;
 RX [1]
 RP NCLECTOTIDE SEQUENCE.
 RA Oman A., Asahi H., Staeckel M.U., Lovorde P.T.,
 RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AF418550; AAL08579.1; -; mRNA.
 DR HSSP: P02768; 1HK1.
 DR SMR: Q95VB7; 26-608.
 DR GO: GO:0005615; C:extracellular space; IEA.
 DR GO: GO:0005386; F:carrier activity; IEA.
 DR GO: GO:0008289; F:lipo binding; IEA.
 DR GO: GO:0006810; P:transport; IEA.
 DR InterPro: IPR001703; Alphafetoprot.
 DR InterPro: IPR000264; Serum albumin.
 DR Pfam: PF00273; Serum_albumin; 3.
 DR PRINTS: PR00803; APEXPROTEIN.
 DR PRINTS: PR00802; SERUMALBUMIN.
 DR SMART: SM00103; ALBUMIN; 3.
 DR PROSITE: PS00212; ALBUMIN; 2.
 SQ SEQUENCE 608 AA; 68225 MW; 858ABB28E1C66B54 CRC64;

Query Match 73.4%; Score 2509; DB 2; Length 608;
 Best Local Similarity 76.4%; Pred. No. 1.6e-150;
 Matches 446; Conservative 79; Mismatches 59; Indels 0; Gaps 0;

QY	60	RDAAKSEVAHRKFDLGEBNFKLVLAIAPAQYLCQCPEDDYKLVNEPTKPTGVADSEA	119
DB	24	RDAAKSEVAHRKFDLGEBNFKLVLAIAPAQYLCQCPEDDYKLVNEPTKPTGVADSEA	83
QY	120	ENCOKSHLTLFGDDLCVVAATLRETYGEMADCAKQEPERRNCPFOHKDQDNPLRLVPRP	179
DB	84	ENCOKSHLTLFGDDLCVVAATLRETYGEMADCAKQEPERRNCPFOHKDQDNPLRLVPRP	143
QY	180	VDVWCTAFHNDNEETFLKKYLYEIARRPYYAPRIPYFAPRILLFFAKRYKAAFTPECCQAADKAA	239
DB	144	AEMACTFQSEAVAVFPMGHVYHEVARRHPPYFAPRIPYFAPRILLFFAKRYKAAFTPECCQAADKAA	203
QY	240	PGLDELDREKQASAKQRLKASIQKQGEAFKAWAVARLSQRPPKABPRAVSVLIVDIT	299
DB	204	PGLDALKEKALASSVNRKICSSLQRFQORAFKAWAVARMSQKPPKADPFAITVTLAVDIT	263
QY	300	KVHTCCGHDLLEGADBRADIAKYICENODSISSKQAKRCEKPRLEKSHCIAVYENDMP	359
DB	264	KLTECCGHDLLFECADBRADIAKYICENODSISSKQAKRCEKPRLEKSHCIAVYENDMP	323
QY	360	ADLPSLAADPVESKDVCKVAVAKDVPLGMFLYEVARRPDPYVLLLRLLAKTYEETLEK	419
DB	324	ADLPSLAADPVEDKDVCKVAVAKDVPLGMFLYEVARRPDPYVLLLRLLAKTYEETLEK	383
QY	420	CAAADPHRECYAKVPDEPKLVYERPQNLTKONCSIFEDLGEYKQONALLVYTKKVPQVS	479
DB	384	CAAADPSPACYGKVLDEFQPLVEBPKNLVKANCELFEDLGEYKQONALLVYTKKAPQVS	443
QY	480	TPTLVESRNIGKVGSKCKPKRAMPKADYLSVVLNOLCVLHEKTPVSADRYTKCTE	539
DB	444	TPTLVESRNIGKVGSKCKPVLPKORLCVVDYLSAILNRVCLVHEKTPVSEVOTKCTG	503
QY	540	SLVNRKPCFSALEVDYTPKPEFNAETPFFHADICTLSEKROIKKQATLAVELVYKHKKA	599
DB	504	SLVNRKPCFSALEVDYTPKPEFNAETPFFHADICTLSEKROIKKQATLAVELVYKHKKA	563
QY	600	TREQLKAVMDDPRAAFVKEKCCQADYKVTGPABEGKULVVASQAL	643
DB	564	TGPOLRVTLGRTYFLDKCCRAKADKBAACFSDPQDLVASSQAL	607

ALBU EQUAS
 ID ALBU EQUAS STANDARD; PRT; 607 AA.
 AC OSXL84:
 DT 01-FEB-2005 (Rel. 46, Created)
 DT 01-FEB-2005 (Rel. 46, Last sequence update)
 DT 10-MAY-2005 (Rel. 47, Last annotation update)
 DE Serum albumin precursor.
 GN Name=Alb;
 OS Equus asinus (Donkey).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Laurasiatheria; Perissodactyla; Equidae; Equus.
 NX NCBI_TaxID=9793;
 RX [1]
 RP NCLECTOTIDE SEQUENCE.
 RC TISSUE=Liver;
 RA Li H., Tang Y., Pingfan R.,
 RT "Full-length cDNA sequence of serum albumin of donkey (Equus asinus)
 and its structure analysis."
 RL Submitted (SEP-2004) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: Serum albumin, the main protein of plasma, has a good
 binding capacity for water, Ca(2+), Na(+), K(+), fatty acids,
 hormones, bilirubin and drugs. Its main function is the regulation
 of the colloid osmotic pressure of blood (By similarity).
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: Plasma.
 CC -1- SIMILARITY: Belongs to the Alb/APF/VDB family.
 CC -1- SIMILARITY: Contains 3 albumin domains.

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 the European Bioinformatics Institute. There are no restrictions on its
 use as long as its content is in no way modified and this statement is not
 removed.

DR	EMBL: AY754333; AA728861.1; -; mRNA.	CC
DR	SMR: Q5XLE4; 27-607.	CC
DR	InterPro: IPR000264; Serum albumin.	CC
DR	Pfam: PF00273; Serum_albumin; 3.	CC
DR	PRINTS: PR00802; SERUMALBUMIN.	CC
DR	PRODom: PD002486; Serum_albumin; 1.	CC
DR	SMART: SM00103; ALBUMIN; 3.	CC
DR	PROSITE: PS00212; ALBUMIN; 3.	CC
FM	Copper; Lipid-binding; Metal-binding; Repeat; signal.	CC
FT	SIGNAL	1
FT	PROPEP	19
FT	CHAIN	25
FT	DOMAIN	25
FT	DOMAIN	211
FT	DOMAIN	403
FT	METAL	27
FT	DISULFID	77
FT	DISULFID	99
FT	DISULFID	115
FT	DISULFID	147
FT	DISULFID	192
FT	DISULFID	200
FT	DISULFID	191
FT	DISULFID	223
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FT	DISULFID	288
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FT	DISULFID	339
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FT	DISULFID	415
FT	DISULFID	460
FT	DISULFID	484
FT	DISULFID	500
FT	DISULFID	499
FT	DISULFID	510
FT	DISULFID	537
FT	DISULFID	582
FT	DISULFID	581
FT	DISULFID	590

Query Match 73.2%; Score 2501.5; DB 1; Length 607;
 Best Local Similarity 75.0%; Pred. No. 4.8e-150;
 Matches 452; Conservative 71; Mismatches 69; Indels 11; Gaps 2;

QY	41	SSYLEGOAAKEFIAMLVKGRDHAHKSVAHRFKDLGSENFKALVLIAPAOYLQCCPEBDHV	100
DB	15	SAVSRG-----VLRSDTHKSEIARHFNDLGEKHFGKLVAVAFSQYLQCCPEBDHV	64
QY	101	KLVNVEYTBPAKTCVADBSAENCKSLHTLFGDKLCTVATLRETYGEMADCCAKQEBERNE	160
DB	65	KLVNVEYTBPAKTCVADBSAENCKSLHTLFGDKLCTVATLRETYGEMADCCAKQEBERNE	124
QY	161	CFLOHKDNDPNLPRLVREVDVMTAFHNDNEFTFLKYLIEIARRRHPYFAPPELLFFAKR	220
DB	125	CFLTHKDDHNLPRKL-KPEPDAQCAAFQEDPDKFLGKYLIEVARRRHPYFAPPELLFFAHE	183
QY	221	YKAAFTTECCOAAADKAACTLPKLDLREDEGKASSAKORLKCASIQKRGERRAFKAMAVARLS	280
DB	184	YKADFTTECCPADDKAGCLIPKLDALKEKRIILSSAKERLKCASFQKRGERRAFKAMAVARLS	243
QY	281	QRPKAEPAVSKLVYDITLTKVHTECCGDLLECADRRADLAKYICENODSISSEKKECCE	340
DB	244	QKPEPKADFAVSKLIVYDITLTKVHTECCGDLLECADRRADLTKYICENODSISSEKLAACCD	303
QY	341	KPLLEKSHCIAEYNDMPADLPSLAADPVESKDVCKNYAEAKDVFELGMEFLYEVARRHPD	400
DB	304	KPLLOKSHCIAEYKEDDLPESDLPALAADFAEDKEICKHNYADADVFLGTFLYEYSRRHPD	363
QY	401	YSVLLLRRLAKTYETLLEKCCAAADPHECVAKVPDEBKPLVEBPONLIRKONCELPEQLGE	460
DB	364	YSVLLLRRLAKTYEATLEKCCAAADPACVAVAVFDQFPLVEBPKSLVKKNCIDLPEVEGS	423
QY	461	YKQNALVYRYYTKVQVSPYPTLVESVSRNLGKVGSKCCPKRPAKMRPCADYLVSVLNLQ	520
DB	424	YDQNALVYRYYTKKAPVSPYPTLVVEIGRTLGGKGSRCCKLPSERIRPCSNHIALMLNRL	483
QY	521	CVLHEKTPVDRVYKCCCTESLIVNRRPCEFSALVEDEFTVVPKPEFAEFTFHADICTLSEKE	580
DB	484	CVLHEKTPVSEKTIKCTCTDLAERRPCFSALIEDBGYIPIKPEFAEFTFHADICTLPEBDE	543
QY	581	ROIKKQYALVELYKHKRATKQKQKAMDDPAAFVEKCCKADDKETCFPAEBSGKLVAAASQ	640
DB	544	KOIKKQSALAEIVKHKRATKQKQKAVLGNFSAFVAKCCGABDKKCAFPABEGKLVAAASQ	603
QY	641	AAV 643	
DB	604	LAL 606	

CC	-1-	SIMILARITY: Belongs to the ALB/AFB/VDL family.	
CC	-1-	SIMILARITY: Contains 3 albumin domains.	
CC	CC	This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not removed.	
CC	EMBL: X74045; CAAS2194.1; -; mRNA.		
CC	PIR: S14053; ABHOS.		
DR	HSSP: P02758; 1HXI.		
DR	SMR: P35747; 27-607.		
DR	InterPro: IPR000264; Serum albumin.		
DR	Pfam: PF00273; Serum albumin; 3.		
DR	PRINTS: PR00802; SERUMALBUMIN.		
DR	ProDom: PD002486; Serum albumin; 1.		
DR	SMART: SM00103; ALBUMIN_3.		
DR	PROSITE: PS00212; ALBUMIN; 3.		
KW	Allergen; Copper; Lipid-binding; Metal-binding; Repeat; Signal.		
FT	SIGNAL 1 18		
FT	PROPEP 19 24		
FT	CHAIN 25 607		
FT	DOMAIN 25 204		
FT	DOMAIN 211 396		
FT	DOMAIN 403 594		
FT	METAL 27 27		
FT	DISULFID 77 86		
FT	DISULFID 99 115		
FT	DISULFID 114 125		
FT	DISULFID 147 192		
FT	DISULFID 191 200		
FT	DISULFID 223 269		
FT	DISULFID 268 276		
FT	DISULFID 288 302		
FT	DISULFID 301 312		
FT	DISULFID 339 384		
FT	DISULFID 383 392		
FT	DISULFID 415 461		
FT	DISULFID 460 471		
FT	DISULFID 484 499		
FT	DISULFID 499 510		
FT	DISULFID 537 582		
FT	DISULFID 581 590		
SQ	SEQUENCE 607 AA; 68539 MW; 256FF6E830A1B90C5 CRC64;		
QY	41	SSYLEGOAAKEFIAMLVKGRDHAHKSVAHRFKDLGSENFKALVLIAPAOYLQCCPEBDHV	100
DB	15	SAVSRG-----VLRSDTHKSEIARHFNDLGEKHFGKLVAVAFSQYLQCCPEBDHV	64
QY	101	KLVNVEYTBPAKTCVADBSAENCKSLHTLFGDKLCTVATLRETYGEMADCCAKQEBERNE	160
DB	65	KLVNVEYTBPAKTCVADBSAENCKSLHTLFGDKLCTVATLRETYGEMADCCAKQEBERNE	124
QY	161	CFLOHKDNDPNLPRLVREVDVMTAFHNDNEFTFLKYLIEIARRRHPYFAPPELLFFAKR	220
DB	125	CFLTHKDDHNLPRKL-KPEPDAQCAAFQEDPDKFLGKYLIEVARRRHPYFAPPELLFFAHE	183
QY	221	YKAAFTTECCOAAADKAACTLPKLDLREDEGKASSAKORLKCASIQKRGERRAFKAMAVARLS	280
DB	184	YKADFTTECCPADDKAGCLIPKLDALKEKRIILSSAKERLKCASFQKRGERRAFKAMAVARLS	243
QY	281	QRPKAEPAVSKLVYDITLTKVHTECCGDLLECADRRADLAKYICENODSISSEKKECCE	340
DB	244	QKPEPKADFAVSKLIVYDITLTKVHTECCGDLLECADRRADLAKYICENODSISSEKLAACCD	303
QY	341	KPLLEKSHCIAEYNDMPADLPSLAADPVESKDVCKNYAEAKDVFELGMEFLYEVARRHPD	400
DB	304	KPLLOKSHCIAEYKEDDLPESDLPALAADFAEDKEICKHNYADADVFLGTFLYEYSRRHPD	363

Query Match Best Local Similarity 72.6%; Score 2481.5; DB 1; Length 607; Matches 450; Conservative 70; Mismatches 72; Indels 11; Gaps 2;

QY 401 YSVVLLRLAKYETTTLEKCCAAADPHKCAKVPDEKPIVBERONLTKONCELPELQGE 460
 DB 364 YSVLLRLRIKATYEAETLEKCCAEADPACRYTWFQDPTPLVEBKSLVKKONCDLFEVGE 423
 QY 461 YKFNALLVYTKKVPQVSTPTLVEVSRNIGKVGSKCKKHPKAKMPCADYLSVVLNOL 520
 DB 424 YDQNALIVYTKKAPQVSTPTLVEIGRTIGKVGSRCKLPESEKRLPCCSNHIALALNRL 483
 QY 521 CVLHEKTPVSDRVTKCTESLIVNRRPCFSALAEVDYVYVYKFNATPTFHADICTLSEKE 580
 DB 484 CVLHEKTPVSEKTLKCTDSTLAEERRPCFSALAEDEGVYVYKFKATPTFHADICTLSEKE 543
 QY 581 KQIKKQALVYLVYKGRKATKPEOIKAWMDPAAVFEKCCADKDKCPCFAKGGKLVASQ 640
 DB 544 KQIKKQALVYLVYKGRKATKPEOIKATVIGNFSALVAVACCGREDEKACPAESGPKLVASQ 603
 QY 641 AAL 643
 DB 604 LAL 606

RESULT 13

05EG48 MICFO PRT; 608 AA.
 ID 05EG48 MICFO PRELIMINARY;
 AC Q5EG48;
 DT 10-MAY-2005 (TREMBlrel. 30, Created)
 DT 10-MAY-2005 (TREMBlrel. 30, Last sequence update)
 DT 10-MAY-2005 (TREMBlrel. 30, Last annotation update)
 DE Albumin.
 OS Microtus fortis calamorum.
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
 OC Muridae; Arvicolinae; Microtus.
 OC NCBI_TaxID=311220;
 RN [1]
 RC NUCLEOTIDE SEQUENCE.
 RC TISSUE=Liver;
 RA Hu W.-X., Wu G.-J., Qin Z.-Q., Luo S.-Q.;
 RT "Albumin gene of Microtus fortis calamorum liver."
 RL Submitted (JAN-2005) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AY885265; AAW79113.1; -; mRNA.
 DR InterPro: IPR001703; Alphafetoprot.
 DR InterPro: IPR00264; Serum_albumin.
 DR Pfam: PF00273; Serum_albumin_3.
 DR PRINTS: PR00803; AFEOTPROTEIN.
 DR PRINTS: PR00802; SERUMALBUMIN.
 DR PRODOM: PD002486; Serum_albumin; 1.
 DR SMART: SM00103; ALBUMIN_3.
 DR DR SMART: PS00212; ALBUMIN; 2.
 DR PROSITE: PS00212; ALBUMIN; 2.
 SQ SEQUENCE 608 AA; 68308 MW; B04A061339494D3F CRC64;

Query Match 72.3%; Score 2469; DB 2; Length 608;
 Best Local Similarity 76.2%; Pred. No. 5-5e-148;
 Matches 445; Conservative 65; Mismatches 74; Indels 0; Gaps 0;

QY 60 RDAKSEVAHRFKDLGSENFVALVLIAPAOYLQCCPFEDHKLVNEVTEFAKTCVADBSA 119
 DB 24 RDAKSEIARHYNVDLGEKXFKGLVLIIPAQHLQCKPYEHLKLVNEVTVDFPAKCAADBSA 83
 QY 120 ENCKSLHTLFGDKLCTVAATLRETYGEMADCCAOEPPRNMCFLOHNDNNTLRLVPE 179
 DB 84 ENCKSLHTLFGDKLCAIPNLGDNVAEVAECCAQEPPRNMCFLKHGKDKRNLPPVAPPE 143
 QY 180 VDWNCSTAFHNESEFTFLKLYEYIARRRHPYFAPRLLPFAKRYKAAFTCCOADAADKACIL 239
 DB 144 AEWNCSTAFHNESEFTFLKLYEYIARRRHPYFAPRLLPFAKRYKAAFTCCOADAADKACILG 203
 QY 240 PKLDELARDEGKASSAKQRLKCAKSLQKFGERRAFKAWAVARLSQRPKAEFAVSKLVYDIT 299
 DB 204 PKLDELARDEGKASSAKQRLKCAKSLQKFGERRAFKAWAVARMSQKFPKADPAEITTKAATLIT 263
 QY 300 KVHRECCGDIIECADDADADLAKYICENQDSISSLQKCECKRPLLEKSHCIAVENDMP 359

DB 264 KVTQECCHDILLECADDRLLEAKYMCNDQATISSKIHFTCCDDKRVLQKAKCLAEVDHDEMP 323
 QY 360 ADLPSLAADPVESKQVCKRYVAEAKQVYELGMPFYEVARRRHPDYSVLLRLAKTYETTLK 419
 DB 324 ADLTPHADPVESKQVCKRYVAEAKQVYELGMPFYEVARRRHPDYSVLLRLAKTYETTLK 383
 QY 420 CCAADPHKCYAKVPEFPKPLVEEPPNLIKONCELPELQGEYKFNALLVRYTKRQVPS 479
 DB 384 CCAADPHKCYAKVPEFPKPLVEEPPNLIKONCELPELQGEYKFNALLVRYTKRQVPS 443
 QY 480 TPTLVVSRNIGKVGSKCKKHPKAKMPCADYLSVVLNOLCVLHEKTPVSDRVTKCTGE 539
 DB 444 TPTLVVSRNIGKVGSKCKKALPEADRLPCVEDYLSAIIHNLCVLHEKTPVSDRVTKCTGE 503
 QY 540 SLVNRPPCSALAEVDYVYKFNATPTFHADICTLSEKREIKQTLVYLVKPKRPA 599
 DB 504 SVERRPPCSALAEVDYVYKFNATPTFHADICTLSEKREIKQTLVYLVKPKRPA 563
 QY 600 TKEQLKAVMDDFAAVFEKCCADKDKCPCFAEKGKLVAAASQAL 643
 DB 564 TEPQLKAVMDDFAAVFEKCCADKDKCPCFAEKGKLVAAASQAL 607

RESULT 14

ALBU RABIT PRT; 608 AA.
 ID ALBU RABIT STANDARD;
 AC P49065;
 DT 01-FEB-1996 (Rel. 33, Created)
 DT 29-MAR-2004 (Rel. 43, Last sequence update)
 DT 10-MAY-2005 (Rel. 47, Last annotation update)
 DE Serum albumin precursor.
 GN Name=Alb;
 OS Oryctolagus cuniculus (Rabbit).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Glires; Lagomorpha; Leporidae;
 OC Oryctolagus.
 OC NCBI_TaxID=9986;
 RN [1]
 RC NUCLEOTIDE SEQUENCE.
 RC STRAIN=New Zealand white; TISSUE=Liver;
 RX MEDLINE=97275135; PubMed=9129029;
 RA Syed S., Schuyler P.D., Kulczycky M., Sheffield W.P.;
 RT "Potent antithrombin activity and delayed clearance from the
 RT circulation characterize recombinant hirudin genetically fused to
 RT albumin."
 RL Blood 89:3243-3252(1997).
 RN [2]
 RP SEQUENCE REVISION TO 322-323 AND 506-507.
 RA Sheffield W.P.;
 RL Submitted (APR-2003) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: Serum albumin, the main protein of plasma, has a good
 CC binding capacity for water, Ca(2+), Na(+), K(+), fatty acids,
 CC hormones, bilirubin and drugs. Its main function is the regulation
 CC of the colloidal osmotic pressure of blood.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: Plasma.
 CC -1- SIMILARITY: Belongs to the ALB/AFB/VDB family.
 CC -1- SIMILARITY: Contains 3 albumin domains.

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 the European Bioinformatics Institute. There are no restrictions on its
 use as long as its content is in no way modified and this statement is not
 removed.
 EMBL: U18344; AB558347.2; -; mRNA.
 DR HSP; P02768; 1E7B.
 DR HSR; P49065; 26-608.
 DR InterPro: IPR001703; Alphafetoprot.
 DR InterPro: IPR00264; Serum_albumin.
 DR Pfam: PF00273; Serum_albumin_3.
 DR PRINTS: PR00803; AFEOTPROTEIN.


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Oy      600  TKBQLKAVMDDFAAVERKCKKADDKETCFABEGKQVVAASQAL 643
      |   |   |   |   |   |   |   |   |   |   |   |   |   |
      |   |   |   |   |   |   |   |   |   |   |   |   |   |
Db      564  TGDQKTVVMBEFSAFLEKCCCKADDKBAACFSEBGPXIVATSQAL 607

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Search completed: April 19, 2006, 12:08:51
 Job time : 172.412 secs

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GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceeleration Ltd.

OM protein - protein search, using sw model

Run on: April 19, 2006, 12:09:12 ; Search time 40.7706 Seconds
(without alignments)
1307.948 Million cell updates/sec

Title: US-10-775-180-447_COPY_30_674

Perfect score: 3417

Sequence: 1 HGEFTSDVSSYLEGQAAK.....TCFAEKGKLVAAASQALGL 645

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

- Database :
- 1: Issued Patents_AA:*
 - 2: /cgm2_6/ptodata/1/1aa/5 COMB.pep:*
 - 3: /cgm2_6/ptodata/1/1aa/6 COMB.pep:*
 - 4: /cgm2_6/ptodata/1/1aa/H_COMB.pep:*
 - 5: /cgm2_6/ptodata/1/1aa/PTBUS_COMB.pep:*
 - 6: /cgm2_6/ptodata/1/1aa/RE_COMB.pep:*
 - 7: /cgm2_6/ptodata/1/1aa/backfillset.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3112.5	91.1	787	1 US-08-256-938-4	Sequence 4, Appli
2	3112.5	91.1	787	2 US-08-797-689-16	Sequence 16, Appl
3	3112.5	91.1	787	1 US-09-984-186-16	Sequence 16, Appl
4	3108	91.0	609	2 US-09-976-594-977	Sequence 977, App
5	3108	91.0	609	2 US-09-919-039-370	Sequence 370, App
6	3108	91.0	610	1 US-08-797-689-2	Sequence 2, Appli
7	3108	91.0	610	2 US-09-984-186-2	Sequence 2, Appli
8	3108	91.0	622	2 US-09-949-016-11170	Sequence 11170, A
9	3104	90.8	783	1 US-08-256-938-2	Sequence 2, Appli
10	3104	90.8	609	1 US-08-223-619-3	Sequence 3, Appli
11	3104	90.8	609	1 US-08-433-037-4	Sequence 4, Appli
12	3104	90.8	609	2 US-08-897-956A-2	Sequence 4, Appli
13	3104	90.8	609	4 PCT-US95-04075-3	Sequence 3, Appli
14	3103.5	90.8	978	2 US-08-897-956A-3	Sequence 3, Appli
15	3103	90.8	585	1 US-08-153-799-14	Sequence 14, Appli
16	3103	90.8	585	1 US-08-702-572-2	Sequence 2, Appli
17	3103	90.8	585	2 US-08-766-746-2	Sequence 2, Appli
18	3103	90.8	585	2 US-09-833-118A-18	Sequence 18, Appli
19	3103	90.8	585	2 US-09-833-929A-18	Sequence 18, Appli
20	3103	90.8	585	2 US-09-833-111A-18	Sequence 18, Appli
21	3093	90.5	585	1 US-08-448-196A-3	Sequence 3, Appli
22	3093	90.5	585	1 US-08-984-176-1	Sequence 3, Appli
23	2458.5	71.9	583	1 US-08-448-196A-5	Sequence 1, Appli
24	2450.5	71.7	583	1 US-08-448-196A-4	Sequence 5, Appli
25	2450.5	71.7	583	2 US-10-360-101-200	Sequence 4, Appli
26	2432.5	71.2	583	1 US-08-448-196A-6	Sequence 20, App
27	2426	71.0	584	1 US-08-448-196A-7	Sequence 6, Appli
					Sequence 7, Appli

Result No.	Score	Query Match	Length	ID	Description
28	2393.5	70.0	604	2 US-10-045-170A-1	Sequence 1, Appli
29	2389	69.9	582	1 US-08-134-638-1	Sequence 1, Appli
30	1256.5	36.8	609	1 US-08-222-619-4	Sequence 4, Appli
31	1256.5	36.8	609	1 US-09-976-594-456	Sequence 456, App
32	1256.5	36.8	609	4 PCT-US95-04075-4	Sequence 4, Appli
33	1256.5	36.8	612	2 US-09-949-016-11201	Sequence 11201, A
34	1213.5	35.5	609	2 US-09-186-949A-2	Sequence 2, Appli
35	1206.5	35.3	590	1 US-08-377-309-2	Sequence 2, Appli
36	1206.5	35.3	590	2 US-09-186-723-2	Sequence 2, Appli
37	1206.5	35.3	590	2 US-08-505-012-5	Sequence 5, Appli
38	1206.5	35.3	590	2 US-09-186-949A-3	Sequence 3, Appli
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40	1206.5	35.3	590	2 US-09-187-978-2	Sequence 2, Appli
41	1206.5	35.3	590	2 US-10-115-701A-2	Sequence 2, Appli
42	1206.5	35.3	590	2 US-09-940-308A-2	Sequence 2, Appli
43	1206.5	35.3	590	2 US-09-940-308A-2	Sequence 2, Appli
44	1206.5	35.3	590	4 PCT-US96-00996-5	Sequence 5, Appli
45	1164.5	34.1	579	1 US-08-448-196A-8	Sequence 8, Appli

ALIGNMENTS

```

RESULT 1
US-08-256-938-4
: Sequence 4, Application US/08256938
: Patent No. 565863
: GENERAL INFORMATION:
: APPLICANT: Yeh, Patrice
: TITLE OF INVENTION: NEW POLYPEPTIDES HAVING GRANULOCYTE
: TITLE OF INVENTION: COLOR STIMULATING ACTIVITY, PREPARATION THEREOF AND
: TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING SAID POLYPEPTIDES
: NUMBER OF SEQUENCES: 12
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Rhone-Poulenc Rorer Inc.
: STREET: 500 Arcola Road, 3C43
: CITY: Collegeville
: STATE: PA
: COUNTRY: USA
: ZIP: 19426
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: Macintosh
: OPERATING SYSTEM: System 7.1
: SOFTWARE: Word 5.0 (PatentIn)
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/256, 938
: FILING DATE:
: CLASSIFICATION: 435
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: FR 92/01065
: FILING DATE: 31-JAN-1992
: ATTORNEY/AGENT INFORMATION:
: NAME: Goodman, Rosanne
: REGISTRATION NUMBER: 32,534
: REFERENCE/DOCKET NUMBER: ST92007-US
: TELEPHONE: (610) 454-3817
: TELEFAX: (610) 454-3808
: INFORMATION FOR SEQ ID NO: 4:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 787 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
: MOLECULE TYPE: protein
: US-08-256-938-4
:
: Query Match 91.1%; Score 3112.5; DB 1; Length 787;
: Best Local Similarity 94.6%; Pred. No. 3.9e-278;
: Matches 596; Conservative 4; Mismatches 29; Indels 1; Gaps 1;
:
: 17 QAAKEFIAMLVKGRHGEGFTSDVSSYLEGQAAKEFIAMLVKGRDAHKSEVAHRPKDLG 75

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Db 158 QGAMPAPASAFQRRAGGVUVAHSITQSFLEVSRYVLRHLAQPGGGGDHAKHSEVAHRRFKDGG 217
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 Db 218 EENFKALVLIAPAOYLQOCPEFBDHVKLVNEVTEPAKTCVAADSAENCDYSIHTLFGDKJC 277
 Qy 136 TVATLTRETYGEMADCCAKORPERNECFLOHKDNPMLPRLVREVDVWMTAFPHDNBETFL 195
 Db 278 TVATLTRETYGEMADCCAKORPERNECFLOHKDNPMLPRLVREVDVWMTAFPHDNBETFL 337
 Qy 196 KKYLYEIAARRHPYFYAPPELLFPKRYKAAFTTECCQAADKAAACLLPKLDELDRDGKASSAK 255
 Db 338 KKYLYEIAARRHPYFYAPPELLFPKRYKAAFTTECCQAADKAAACLLPKLDELDRDGKASSAK 397
 Qy 256 QRLKASLQKFGERRAFKAWAVARLSQRPFAEFAEVSKEVTDLTKVHTTECGHGDLLRECAD 315
 Db 398 QRLKASLQKFGERRAFKAWAVARLSQRPFAEFAEVSKEVTDLTKVHTTECGHGDLLRECAD 457
 Qy 316 DRADLAKYICENODSISSKLKECCERKPLKESHCIAEVNDMPADLPSLAADPVESKDV 375
 Db 458 DRADLAKYICENODSISSKLKECCERKPLKESHCIAEVNDMPADLPSLAADPVESKDV 517
 Qy 376 CKNYAEAKDVFLEGMFLYEYARRHPDYSVLLRLAKTYETTLKCCQAADPHECYAKVFD 435
 Db 518 CKNYAEAKDVFLEGMFLYEYARRHPDYSVLLRLAKTYETTLKCCQAADPHECYAKVFD 577
 Qy 436 EFKPLVEEPONLIKONCELFEOLEGEYKFOVALLVRYTKYPOVSTPPLVIVSRNLGKVG 495
 Db 578 EFKPLVEEPONLIKONCELFEOLEGEYKFOVALLVRYTKYPOVSTPPLVIVSRNLGKVG 637
 Qy 496 KCCGHPAKRMPCAEDYLSVLANOLCVLHKTVPDSRVTCCCTESLVNRRPCEFSALAEVD 555
 Db 638 KCCGHPAKRMPCAEDYLSVLANOLCVLHKTVPDSRVTCCCTESLVNRRPCEFSALAEVD 697
 Qy 556 TYVPEKFAEFTFTHADICTLSEKERQIKKQOTALVELVKKPKRATKEQLKAVMDPFAAFV 615
 Db 698 TYVPEKFAEFTFTHADICTLSEKERQIKKQOTALVELVKKPKRATKEQLKAVMDPFAAFV 757
 Qy 616 EKCCKADDKETCFABEGKLVVAASQAALGL 645
 Db 758 EKCCKADDKETCFABEGKLVVAASQAALGL 787
 RESULT 2
 US-08-797-689-16
 ; Sequence 16, Application US/08797689
 ; Patent No. 5876969
 ; GENERAL INFORMATION:
 ; APPLICANT: Fleeter, Reinhard
 ; APPLICANT: Fournier, Alain
 ; APPLICANT: Guitton, Jean-Dominique
 ; APPLICANT: Jung, Gerard
 ; APPLICANT: Yeh, Patricia
 ; TITLE OF INVENTION: NOVEL BIOLOGICALLY ACTIVE POLYPEPTIDES,
 ; PREPARATION THEREOF AND PHARMACEUTICAL COMPOSITION
 ; TITLE OF INVENTION: CONTAINING SAID POLYPEPTIDES
 ; NUMBER OF SEQUENCES: 36
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Rhone-Poulenc Rorer Inc.
 ; STREET: 500 Arcola Road, 3643
 ; CITY: Collegenville
 ; STATE: PA
 ; COUNTRY: USA
 ; ZIP: 19426
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: Macintosh
 ; OPERATING SYSTEM: System 7.1
 ; SOFTWARE: Word 5.1 (PatentIn)
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/797,689
 ; FILING DATE: 31-JAN-1997
 ; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/256,927
 ; FILING DATE: 28-JUL-1994
 ; APPLICATION NUMBER: FR 92/01064
 ; FILING DATE: 31-JAN-1992
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: PCT/FR93/00085
 ; FILING DATE: 28-JAN-1993
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Smith Ph.D., Julie K.
 ; REGISTRATION NUMBER: P-38,619
 ; REFERENCE/DOCKET NUMBER: ST92006-US
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (610) 454-3839
 ; TELEFAX: (610) 454-3808
 ; INFORMATION FOR SEQ ID NO: 16:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 787 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; US-08-797-689-16
 Query Match 91.1%; Score 3112.5; DB 1; Length 787;
 Best Local Similarity 94.6%; Pred. No. 3,9e-278;
 Matches 596; Conservative 4; Mismatches 29; Indels 1; Gaps 1;
 Qy 17 QAKKEPIAMLVKGRHGEGRFTSPVSSYLE-GQNAKKEPIAMLVKGRDARKSEVAHRRFKDGG 75
 Db 158 QGAMPAPASAFQRRAGGVUVAHSITQSFLEVSRYVLRHLAQPGGGGDHAKHSEVAHRRFKDGG 217
 Qy 76 EENFKALVLIAPAOYLQOCPEFBDHVKLVNEVTEPAKTCVAADSAENCDYSIHTLFGDKJC 135
 Db 218 EENFKALVLIAPAOYLQOCPEFBDHVKLVNEVTEPAKTCVAADSAENCDYSIHTLFGDKJC 277
 Qy 136 TVATLTRETYGEMADCCAKORPERNECFLOHKDNPMLPRLVREVDVWMTAFPHDNBETFL 195
 Db 278 TVATLTRETYGEMADCCAKORPERNECFLOHKDNPMLPRLVREVDVWMTAFPHDNBETFL 337
 Qy 196 KKYLYEIAARRHPYFYAPPELLFPKRYKAAFTTECCQAADKAAACLLPKLDELDRDGKASSAK 255
 Db 338 KKYLYEIAARRHPYFYAPPELLFPKRYKAAFTTECCQAADKAAACLLPKLDELDRDGKASSAK 397
 Qy 256 QRLKASLQKFGERRAFKAWAVARLSQRPFAEFAEVSKEVTDLTKVHTTECGHGDLLRECAD 315
 Db 398 QRLKASLQKFGERRAFKAWAVARLSQRPFAEFAEVSKEVTDLTKVHTTECGHGDLLRECAD 457
 Qy 316 DRADLAKYICENODSISSKLKECCERKPLKESHCIAEVNDMPADLPSLAADPVESKDV 375
 Db 458 DRADLAKYICENODSISSKLKECCERKPLKESHCIAEVNDMPADLPSLAADPVESKDV 517
 Qy 376 CKNYAEAKDVFLEGMFLYEYARRHPDYSVLLRLAKTYETTLKCCQAADPHECYAKVFD 435
 Db 518 CKNYAEAKDVFLEGMFLYEYARRHPDYSVLLRLAKTYETTLKCCQAADPHECYAKVFD 577
 Qy 436 EFKPLVEEPONLIKONCELFEOLEGEYKFOVALLVRYTKYPOVSTPPLVIVSRNLGKVG 495
 Db 578 EFKPLVEEPONLIKONCELFEOLEGEYKFOVALLVRYTKYPOVSTPPLVIVSRNLGKVG 637
 Qy 496 KCCGHPAKRMPCAEDYLSVLANOLCVLHKTVPDSRVTCCCTESLVNRRPCEFSALAEVD 555
 Db 638 KCCGHPAKRMPCAEDYLSVLANOLCVLHKTVPDSRVTCCCTESLVNRRPCEFSALAEVD 697
 Qy 556 TYVPEKFAEFTFTHADICTLSEKERQIKKQOTALVELVKKPKRATKEQLKAVMDPFAAFV 615
 Db 698 TYVPEKFAEFTFTHADICTLSEKERQIKKQOTALVELVKKPKRATKEQLKAVMDPFAAFV 757
 Qy 616 EKCCKADDKETCFABEGKLVVAASQAALGL 645
 Db 758 EKCCKADDKETCFABEGKLVVAASQAALGL 787
 RESULT 3

US-09-984-186-16

Sequence 16, Application US/09984186

Patent No. 6686179

GENERAL INFORMATION:

APPLICANT: Fleer, Reinhard

Fournier, Alain

Guitton, Jean-Dominique

Yeh, Gerard

Jung, Patricia

TITLE OF INVENTION: NOVEL BIOLOGICALLY ACTIVE POLYPEPTIDES,

PREPARATION THEREOF AND PHARMACEUTICAL COMPOSITION

CONTAINING SAID POLYPEPTIDES

NUMBER OF SEQUENCES: 36

CORRESPONDENCE ADDRESS:

ADDRESSEE: Rhone-Poulenc Rorer Inc.

STREET: 500 Arcola Road, 3C43

CITY: Collegenville

STATE: PA

COUNTRY: USA

ZIP: 19426

COMPUTER READABLE FORM:

MEDIUM TYPE: floppy disk

COMPUTER: Macintosh

OPERATING SYSTEM: System 7.1

SOFTWARE: Word 5.1 (PatentIn)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/984,186

FILING DATE: 29-Oct-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/797,689

FILING DATE: 31-JAN-1997

APPLICATION NUMBER: US 08/256,927

FILING DATE: 28-JUL-1994

APPLICATION NUMBER: FR 92/01064

FILING DATE: 31-JAN-1992

APPLICATION NUMBER: PCT/FR93/00085

FILING DATE: 28-JAN-1993

ATTORNEY/AGENT INFORMATION:

NAME: Smith Ph.D., Julie K.

REGISTRATION NUMBER: P-38,619

REFERENCE/DOCKET NUMBER: ST92006-US

TELEPHONE: (610) 454-3839

TELEPHONE: (610) 454-3808

INFORMATION FOR SEQ ID NO: 16:

SEQUENCE CHARACTERISTICS:

LENGTH: 787 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 16:

US-09-984-186-16

Query Match 91.1%; Score 3112.5; DB 2; Length 787;

Best Local Similarity 94.6%; Pred. No. 3,9e-278;

Matches 596; Conservative 4; Mismatches 29; Indels 1; Gaps 1;

17 QAAKEFIAMIVKGRHGEFTSDVSSYLE-GQAAKEFIAMIVKGRDAHKSEVAARHFKDGLG 75

158 QGAMPARFASAFQRRKGGVIVASHLSQSFLEVSRYRUIRHLAQFGGGDAHKSEVAARHFKDGLG 217

76 ENFKALVLIIFAQYLQCCPFEDHVKLVNVEVTEFAKTCVADESAENCDKSIHTLFGDKLC 135

218 ENFKALVLIIFAQYLQCCPFEDHVKLVNVEVTEFAKTCVADESAENCDKSIHTLFGDKLC 277

136 TVATLRFTYGMADCCAKQEPERRNCFLOHKDNDNPLRLVLRPVDVWVCTAAPHNDERTFL 195

278 TVATLRFTYGMADCCAKQEPERRNCFLOHKDNDNPLRLVLRPVDVWVCTAAPHNDERTFL 337

196 KKVLEIARRHPYFYAPPELLFPFAKRYKAAFTCCOAAADKAACTLLPKLDELDRDEGKASSAK 255

338 KKVLEIARRHPYFYAPPELLFPFAKRYKAAFTCCOAAADKAACTLLPKLDELDRDEGKASSAK 397

256 ORLKASLQKFGGERAFKAWAVARLSQRFPAKFAVSKLVTDLTKVHTRECHGDLLECAD 315

398 QRLKASLQKFGGERAFKAWAVARLSQRFPAKFAVSKLVTDLTKVHTRECHGDLLECAD 457

316 DRADLAKYICENODSISSSKIKKCCERPLLEKSHCIABVENDERPADLPISLADPVSSKDV 375

458 DRADLAKYICENODSISSSKIKKCCERPLLEKSHCIABVENDERPADLPISLADPVSSKDV 517

376 CRNYAARAVYFAMPELYEYARRHDPYSVLLRLATVETTELKCCAAADPHCEYAKVFP 435

518 CRNYAARAVYFAMPELYEYARRHDPYSVLLRLATVETTELKCCAAADPHCEYAKVFP 577

436 EFKPIVSEPNLILKONCELEFQEGYKFNQALIVRYTKVPOVSTPLIVEVSNLQVGS 495

578 EFKPIVSEPNLILKONCELEFQEGYKFNQALIVRYTKVPOVSTPLIVEVSNLQVGS 637

496 KCKGHPKAKMPCAEVDYLSVNLQLCVLRHETVSPRVTKCTRESLVNRRPFCSSALAEVDE 555

638 KCKGHPKAKMPCAEVDYLSVNLQLCVLRHETVSPRVTKCTRESLVNRRPFCSSALAEVDE 697

556 TVYPKERNMATEPETHADICTLSERKQIKQVLAIVLHKKPKATKROLKAVVMDPFAAFV 615

698 TVYPKERNMATEPETHADICTLSERKQIKQVLAIVLHKKPKATKROLKAVVMDPFAAFV 757

616 EKCCKADDKETCFRABEGKLVAAASQAALGL 645

758 EKCCKADDKETCFRABEGKLVAAASQAALGL 787

Db

Qy

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Qy

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Qy

Db

QY 300 KVTTECHGDLLECADRRADLAKYICENODSISKLECCCEKRPLEKSHCIAVENDEMP 359
 DB 264 KVTTECHGDLLECADRRADLAKYICENODSISKLECCCEKRPLEKSHCIAVENDEMP 323
 QY 360 ADPLSLAADPVESKDVCKNYAARAKDVFLEGMFLYEYARRRHPDYSVLLLRLAKTYYETTLK 419
 DB 324 ADPLSLAADPVESKDVCKNYAARAKDVFLEGMFLYEYARRRHPDYSVLLLRLAKTYYETTLK 383
 QY 420 CCAAADPHECYAKVPEFEPFLVBEPPONLTKONCELPFOLEGEYKFOVALLVRYTKVQVYS 479
 DB 384 CCAAADPHECYAKVPEFEPFLVBEPPONLTKONCELPFOLEGEYKFOVALLVRYTKVQVYS 443
 QY 480 TPTLVESVSNLGVKVSCKCKHPEAKRMPCAEDYLSVLANQLCVLHEKTPVSDRVTKCTTE 539
 DB 444 TPTLVESVSNLGVKVSCKCKHPEAKRMPCAEDYLSVLANQLCVLHEKTPVSDRVTKCTTE 503
 QY 540 SLVNRPPCFSALEVDETVYVPEKFNATFTFHADICTLSEKERQIKKQTLVBLVVKHKKPKA 599
 DB 504 SLVNRPPCFSALEVDETVYVPEKFNATFTFHADICTLSEKERQIKKQTLVBLVVKHKKPKA 563
 QY 600 TKEQLKAVMDPFAAFVKECKCKADDKETCFABEGKQLVAASQAALGL 645
 DB 564 TKEQLKAVMDPFAAFVKECKCKADDKETCFABEGKQLVAASQAALGL 609

RESULT 5
 US-09-919-039-370
 ; Sequence 370, Application US/09919039
 ; Patent No. 6727066
 ; GENERAL INFORMATION:
 ; APPLICANT: Kaeser, Matthew R.
 ; TITLE OF INVENTION: GENES EXPRESSED IN TREATED HUMAN C3A LIVER CELL CULTURES
 ; FILE REFERENCE: PA-0035 US
 ; CURRENT FILING DATE: 2002-09-09
 ; PRIORITY FILING DATE: 60/222,113
 ; PRIOR APPLICATION NUMBER: 2000-07-28
 ; NUMBER OF SEQ ID NOS: 401
 ; SOFTWARE: PERL Program
 ; SEQ ID NO 370
 ; LENGTH: 609
 ; TYPE: PRN
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: misc_feature
 ; OTHER INFORMATION: Incyte ID No. 6727066 088957CD1
 US-09-919-039-370

Query Match 91.0%; Score 3108; DB 2; Length 609;
 Best Local Similarity 100.0%; Prad. No. 6,9e-278;
 Matches 586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 60 RDAHKSVAHRFKDLGSENFKALVLIAPAOYLQCCPEEDHVKLVNVEYTERAKTCVADBSA 119
 DB 24 RDAHKSVAHRFKDLGSENFKALVLIAPAOYLQCCPEEDHVKLVNVEYTERAKTCVADBSA 83
 QY 120 ENCPKSIHTLFGDKLCTVATLRETYGEMADCAQEPERNRCPLOHDKDNNLRLVPRP 179
 DB 84 ENCPKSIHTLFGDKLCTVATLRETYGEMADCAQEPERNRCPLOHDKDNNLRLVPRP 143
 QY 180 VDWVWCTAAPHNDEFTPIKKYLYEIVARRHPYFAPBELLPFAKRYKAAFTFCCQAADKAACL 239
 DB 144 VDWVWCTAAPHNDEFTPIKKYLYEIVARRHPYFAPBELLPFAKRYKAAFTFCCQAADKAACL 203
 QY 240 PKLDELADDEGKASSAKQRLKCAASIQKFGERAFKAAVAVALRSQRPKAEFAVSKLVDTLT 299
 DB 204 PKLDELADDEGKASSAKQRLKCAASIQKFGERAFKAAVAVALRSQRPKAEFAVSKLVDTLT 263
 QY 300 KVTTECHGDLLECADRRADLAKYICENODSISKLECCCEKRPLEKSHCIAVENDEMP 359
 DB 264 KVTTECHGDLLECADRRADLAKYICENODSISKLECCCEKRPLEKSHCIAVENDEMP 323

QY 360 ADPLSLAADPVESKDVCKNYAARAKDVFLEGMFLYEYARRRHPDYSVLLLRLAKTYYETTLK 419
 DB 324 ADPLSLAADPVESKDVCKNYAARAKDVFLEGMFLYEYARRRHPDYSVLLLRLAKTYYETTLK 383
 QY 420 CCAAADPHECYAKVPEFEPFLVBEPPONLTKONCELPFOLEGEYKFOVALLVRYTKVQVYS 479
 DB 384 CCAAADPHECYAKVPEFEPFLVBEPPONLTKONCELPFOLEGEYKFOVALLVRYTKVQVYS 443
 QY 480 TPTLVESVSNLGVKVSCKCKHPEAKRMPCAEDYLSVLANQLCVLHEKTPVSDRVTKCTTE 539
 DB 444 TPTLVESVSNLGVKVSCKCKHPEAKRMPCAEDYLSVLANQLCVLHEKTPVSDRVTKCTTE 503
 QY 540 SLVNRPPCFSALEVDETVYVPEKFNATFTFHADICTLSEKERQIKKQTLVBLVVKHKKPKA 599
 DB 504 SLVNRPPCFSALEVDETVYVPEKFNATFTFHADICTLSEKERQIKKQTLVBLVVKHKKPKA 563
 QY 600 TKEQLKAVMDPFAAFVKECKCKADDKETCFABEGKQLVAASQAALGL 645
 DB 564 TKEQLKAVMDPFAAFVKECKCKADDKETCFABEGKQLVAASQAALGL 609

RESULT 6
 US-08-797-689-2
 ; Sequence 2, Application US/08797689
 ; Patent No. 5876969
 ; GENERAL INFORMATION:
 ; APPLICANT: Fleer, Reinhard
 ; APPLICANT: Fournier, Alain
 ; APPLICANT: Jung, Gerard
 ; APPLICANT: Yen, Patrice
 ; TITLE OF INVENTION: NOVEL BIOLOGICALLY ACTIVE POLYPEPTIDES,
 ; TITLE OF INVENTION: PREPARATION THEREOF AND PHARMACEUTICAL COMPOSITION
 ; NUMBER OF SEQUENCES: 36
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSER: Rhone-Poulenc Rorer Inc.
 ; STREET: 500 Arcola Road, 3C43
 ; CITY: Collegeville
 ; STATE: PA
 ; COUNTRY: USA
 ; ZIP: 19426
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: Magintosh
 ; OPERATING SYSTEM: System 7.1
 ; SOFTWARE: Word 5.1 (PatentIn)
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/797,689
 ; FILING DATE: 31-JAN-1997
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/256,927
 ; FILING DATE: 28-JUL-1994
 ; APPLICATION NUMBER: FR 92/01064
 ; FILING DATE: 31-JAN-1992
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: PCT/FR93/00085
 ; FILING DATE: 28-JAN-1993
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Smith Ph.D., Julie K.
 ; REGISTRATION NUMBER: P-38,619
 ; REFERENCE/DOCKET NUMBER: ST92006-US
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (610) 454-3839
 ; TELEFAX: (610) 454-3808
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 610 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 US-08-797-689-2

Query Match 91.0%; Score 3108; DB 1; Length 610;
Best Local Similarity 100.0%; Pred. No. 6,9e-278; Indels 0; Gaps 0;
Matches 586; Conservative 0; Mismatches 0;

Table with columns: QY, DB, Accession ID, and Sequence. Rows include entries like 60 RDAHKSVAHRFKDLGSENFALVLIAPAQYLQCCPPEDHVKLVNEVTEPAKTCVADBSA 119, 24 RDAHKSVAHRFKDLGSENFALVLIAPAQYLQCCPPEDHVKLVNEVTEPAKTCVADBSA 83, etc.

RESULT 7

US-09-984-186-2
Sequence 2, Application US/09984186
Patent No. 6686179
GENERAL INFORMATION:
APPLICANT: Pleer, Reinhard
Fournier, Alain
Guitton, Jean-Dominique
Jung, Gerard
Yeh, Patricia
TITLE OF INVENTION: NOVEL BIOLOGICALLY ACTIVE POLYPEPTIDES, PREPARATION THEREOF AND PHARMACEUTICAL COMPOSITION CONTAINING SAID POLYPEPTIDES
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSER: Rhone-Poulenc Rorer Inc.
STREET: 500 Arcola Road, 3C43
CITY: Collegetville
STATE: PA
COUNTRY: USA
ZIP: 19426
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: System 7.1
SOFTWARE: Word 5.1 (PatentIn)
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/984,186
FILING DATE: 29-Oct-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/797,689
FILING DATE: 31-JAN-1997
APPLICATION NUMBER: US 08/256,927
FILING DATE: 28-JUL-1994
APPLICATION NUMBER: FR 92/01064
FILING DATE: 31-JAN-1992
APPLICATION NUMBER: PCT/FR93/00085
FILING DATE: 28-JAN-1993
ATTORNEY/AGENT INFORMATION:
NAME: Smith Ph.D., Julie K.
REGISTRATION NUMBER: P-38,619
REFERENCE/DOCKET NUMBER: 5792006-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (610) 454-3839
TELEFAX: (610) 454-3808
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 610 amino acids
Type: amino acid
MOLECULE TYPE: protein
TOPOLGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 2:

Table with columns: QY, DB, Accession ID, and Sequence. Rows include entries like 60 RDAHKSVAHRFKDLGSENFALVLIAPAQYLQCCPPEDHVKLVNEVTEPAKTCVADBSA 119, 24 RDAHKSVAHRFKDLGSENFALVLIAPAQYLQCCPPEDHVKLVNEVTEPAKTCVADBSA 83, etc.

RESULT 7

US-09-984-186-2
Sequence 2, Application US/09984186
Patent No. 6686179
GENERAL INFORMATION:
APPLICANT: Pleer, Reinhard
Fournier, Alain
Guitton, Jean-Dominique
Jung, Gerard
Yeh, Patricia
TITLE OF INVENTION: NOVEL BIOLOGICALLY ACTIVE POLYPEPTIDES, PREPARATION THEREOF AND PHARMACEUTICAL COMPOSITION CONTAINING SAID POLYPEPTIDES
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSER: Rhone-Poulenc Rorer Inc.
STREET: 500 Arcola Road, 3C43
CITY: Collegetville
STATE: PA
COUNTRY: USA
ZIP: 19426
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: System 7.1
SOFTWARE: Word 5.1 (PatentIn)
CURRENT APPLICATION DATA:

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RESULT 8
US-09-949-016-11170 Application US/09949016
; Sequence 11170, Application US/09949016
; Patent No. 681239
; GENERAL INFORMATION:
; APPLICANT: VERITER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: C1001307
; CURRENT APPLICATION NUMBER: US/09/949, 016
; PRIORITY FILING DATE: 2000-04-14
; PRIORITY FILING DATE: 2000-04-14, 755
; PRIORITY FILING DATE: 2000-10-20
; PRIORITY FILING DATE: 2000-10-20
; PRIORITY FILING DATE: 2000-10-03
; PRIORITY FILING DATE: 2000-09-08
; PRIORITY FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11170
; LENGTH: 622
; TYPE: PRT
; ORGANISM: Human
US-09-949-016-11170

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Query Match 91.0%; Score 3108; DB 2; Length 622;
Best Local Similarity 100.0%; Pred. No. 7.1e-278;
Matches 586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 60 RDAHKSVAHRFKDLDGSENFKALVLIAPAOYLQCCPEEDHVKLVNVEYTERFAKTCVADESA 119
DB 37 RDAHKSVAHRFKDLDGSENFKALVLIAPAOYLQCCPEEDHVKLVNVEYTERFAKTCVADESA 96
QY 120 ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOBERNECFLOHKDNDPNIPLRVRPE 179
DB 97 ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOBERNECFLOHKDNDPNIPLRVRPE 156
QY 180 VDWACIAFHNEBETFLKYYLIEIARRHPYFAPELLFFAKRYKAAPTECCOADAADKAACL 239
DB 157 VDWACIAFHNEBETFLKYYLIEIARRHPYFAPELLFFAKRYKAAPTECCOADAADKAACL 216
QY 240 PKDELDEDEGKASSAKORLKCASIQKGERAFKAWAVARISQRPKAFPAEVSGLVTDLT 299
DB 217 PKDELDEDEGKASSAKORLKCASIQKGERAFKAWAVARISQRPKAFPAEVSGLVTDLT 276
QY 300 KVHTECGHDLLECADRADLAKYICENODSISSKLKECCERPLLEKSHCIAEVENDEMP 359
DB 277 KVHTECGHDLLECADRADLAKYICENODSISSKLKECCERPLLEKSHCIAEVENDEMP 336
QY 360 ADLPSLIAADPVESKDVCKNYAEAKDVFELGMFLYEYARRHPDYSVVLLLRILAKTYETTLK 419
DB 337 ADLPSLIAADPVESKDVCKNYAEAKDVFELGMFLYEYARRHPDYSVVLLLRILAKTYETTLK 396
QY 420 CCAAADHHECYAKVDFEFPKPLVEBPQNLIKONCELEFQDLSGYYKFNALLVRYTKYQVQS 479
DB 397 CCAAADHHECYAKVDFEFPKPLVEBPQNLIKONCELEFQDLSGYYKFNALLVRYTKYQVQS 456
QY 480 TPRLVRSYRNIGKYGSSCKGRPEAKRMPCADYISVVLNOLCVLHEKTPVSDRATKCCCTE 539
DB 457 TPRLVRSYRNIGKYGSSCKGRPEAKRMPCADYISVVLNOLCVLHEKTPVSDRATKCCCTE 516
QY 540 SILVNRRCFSALEVEDETVYKPEFNAETFTFHADICTLSEKERQIKKOTALVELVYKHPKA 599
DB 517 SILVNRRCFSALEVEDETVYKPEFNAETFTFHADICTLSEKERQIKKOTALVELVYKHPKA 576
QY 600 TKEQLKAVMDPFAAFVBEKCKADDXETGFAEBSGKLVVAASQALGL 645
DB 577 TKEQLKAVMDPFAAFVBEKCKADDXETGFAEBSGKLVVAASQALGL 622

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RESULT 9
US-08-256-938-2
; Sequence 2, Application US/08256938

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; Patent No. 5665863
; GENERAL INFORMATION:
; APPLICANT: Yeh, Patrice
; TITLE OF INVENTION: NEW POLYPEPTIDES HAVING GRANULOCYTE
; COLONY STIMULATING ACTIVITY, PREPARATION THEREOF AND
; PHARMACEUTICAL COMPOSITIONS CONTAINING SAID POLYPEPTIDES
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Rhone-Poulenc Rorer Inc.
; STREET: 500 Arcola Road, 3C43
; CITY: Collegeville
; STATE: PA
; COUNTRY: USA
; ZIP: 19426
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: Macintosh
; SOFTWARE: Word 5.0 (PatentIn)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/256,938
; FILING DATE:
; CLASSIFICATION: 435
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: FR 92/01065
; FILING DATE: 31-JAN-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Goodman, Rosanne
; REGISTRATION NUMBER: 32,534
; REFERENCE/DOCKET NUMBER: ST92007-US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (610) 454-3817
; TELEFAX: (610) 454-3808
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 783 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-256-938-2

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Query Match 91.0%; Score 3108; DB 1; Length 783;
Best Local Similarity 100.0%; Pred. No. 1e-277;
Matches 586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 60 RDAHKSVAHRFKDLDGSENFKALVLIAPAOYLQCCPEEDHVKLVNVEYTERFAKTCVADESA 119
DB 24 RDAHKSVAHRFKDLDGSENFKALVLIAPAOYLQCCPEEDHVKLVNVEYTERFAKTCVADESA 83
QY 120 ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOBERNECFLOHKDNDPNIPLRVRPE 179
DB 84 ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKOBERNECFLOHKDNDPNIPLRVRPE 143
QY 180 VDWACIAFHNEBETFLKYYLIEIARRHPYFAPELLFFAKRYKAAPTECCOADAADKAACL 239
DB 144 VDWACIAFHNEBETFLKYYLIEIARRHPYFAPELLFFAKRYKAAPTECCOADAADKAACL 203
QY 240 PKDELDEDEGKASSAKORLKCASIQKGERAFKAWAVARISQRPKAFPAEVSGLVTDLT 299
DB 204 PKDELDEDEGKASSAKORLKCASIQKGERAFKAWAVARISQRPKAFPAEVSGLVTDLT 263
QY 300 KVHTECGHDLLECADRADLAKYICENODSISSKLKECCERPLLEKSHCIAEVENDEMP 359
DB 264 KVHTECGHDLLECADRADLAKYICENODSISSKLKECCERPLLEKSHCIAEVENDEMP 323
QY 360 ADLPSLIAADPVESKDVCKNYAEAKDVFELGMFLYEYARRHPDYSVVLLLRILAKTYETTLK 419
DB 324 ADLPSLIAADPVESKDVCKNYAEAKDVFELGMFLYEYARRHPDYSVVLLLRILAKTYETTLK 383
QY 420 CCAAADHHECYAKVDFEFPKPLVEBPQNLIKONCELEFQDLSGYYKFNALLVRYTKYQVQS 479
DB 384 CCAAADHHECYAKVDFEFPKPLVEBPQNLIKONCELEFQDLSGYYKFNALLVRYTKYQVQS 443

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OY 480 TPTLVEVSRNIGKVGSKCCCKHPBEAKRMPCAEDYLSVLANQLCVLHEKTPVSDRVTCKCTE 539
 DB 444 TPTLVEVSRNIGKVGSKCCCKHPBEAKRMPCAEDYLSVLANQLCVLHEKTPVSDRVTCKCTE 503
 OY 540 SLVNRRCFSALEBVDFTYVPEKFNATFTFHADICTLSEKERQIKKOTALVELVYKHKPKA 599
 DB 504 SLVNRRCFSALEBVDFTYVPEKFNATFTFHADICTLSEKERQIKKOTALVELVYKHKPKA 563
 OY 600 TKEQIKAVMDPFAAFVFKCCCKADDKETCFABEGKGLVAASQALGL 645
 DB 564 TKEQIKAVMDPFAAFVFKCCCKADDKETCFABEGKGLVAASQALGL 609

RESULT 10

US-08-222-619-3
 ; Sequence 3, Application US/08222619
 ; Patent No. 5652352
 ; GENERAL INFORMATION:
 ; APPLICANT: Lichenstein, Henri
 ; APPLICANT: Lyons, David
 ; APPLICANT: Morfel, Mark
 ; APPLICANT: Wright, Samuel
 ; TITLE OF INVENTION: Afamin: A Human Serum Albumin-Like
 ; TITLE OF INVENTION: Proteins
 ; NUMBER OF SEQUENCES: 33
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESS: Amgen Center, Patent Operations/RRC
 ; STREET: 1840 DeHavilland Drive
 ; CITY: Thousand Oaks
 ; STATE: California
 ; COUNTRY: U.S.
 ; ZIP: 91320-1799
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/222,619
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; INFORMATION FOR SEQ ID NO: 3:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 609 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: unknown
 ; TOPOLOGY: unknown
 ; MOLECULE TYPE: protein
 ; US-08-222-619-3

Query Match 90.8%; Score 3104; DB 1; Length 609;
 Best Local Similarity 99.8%; Pred. No. 1.6e-277;
 Matches 585; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 60 RDAHSEVAHRRKDLGSENFKALVLAFAQYLQCCPEFDHVKLVNEVTEPAKTVAADSA 119
 DB 24 RDAHSEVAHRRKDLGSENFKALVLAFAQYLQCCPEFDHVKLVNEVTEPAKTVAADSA 83
 OY 120 ENCDKSLHTLFGDKLCTVAITLRETYGEMADCCAKOPEPHEKCFLOHKDNPMLPRLVPE 179
 DB 84 ENCDKSLHTLFGDKLCTVAITLRETYGEMADCCAKOPEPHEKCFLOHKDNPMLPRLVPE 143
 OY 180 VDMCTAFHNEETPKKTYLVIARRHPYVAPBELIFPAKRYKAAFTBCCOAAADYACIL 239
 DB 144 VDMCTAFHNEETPKKTYLVIARRHPYVAPBELIFPAKRYKAAFTBCCOAAADYACIL 203
 OY 240 PKLDELDRDGGKASAKORLKCAKSLQKGGRRARFANAVARLRSRPPKAEPAVSKLVTDLT 299
 DB 204 PKLDELDRDGGKASAKORLKCAKSLQKGGRRARFANAVARLRSRPPKAEPAVSKLVTDLT 263
 OY 300 KYHTTECHGDLLECADRDLAKYICENODSISSKLKECCERPLLEKSHCIAEVENDEMP 359
 DB 264 KYHTTECHGDLLECADRDLAKYICENODSISSKLKECCERPLLEKSHCIAEVENDEMP 323

OY 360 ADLPSLAADFEVSKDCKVKNYAEAKDVELGMEFLVEYARRHPDYSVLLLRLLAKTYETLLEK 419
 DB 324 ADLPSLAADFEVSKDCKVKNYAEAKDVELGMEFLVEYARRHPDYSVLLLRLLAKTYETLLEK 383
 OY 420 CCAAADPHECYAKYFDEPKPLVEBPQMLIKONCELFEQLGKYKQMLLVRYTTRKQVQS 479
 DB 384 CCAAADPHECYAKYFDEPKPLVEBPQMLIKONCELFEQLGKYKQMLLVRYTTRKQVQS 443
 OY 480 TPTLVEVSRNIGKVGSKCCCKHPBEAKRMPCAEDYLSVLANQLCVLHEKTPVSDRVTCKCTE 539
 DB 444 TPTLVEVSRNIGKVGSKCCCKHPBEAKRMPCAEDYLSVLANQLCVLHEKTPVSDRVTCKCTE 503
 OY 540 SLVNRRCFSALEBVDFTYVPEKFNATFTFHADICTLSEKERQIKKOTALVELVYKHKPKA 599
 DB 504 SLVNRRCFSALEBVDFTYVPEKFNATFTFHADICTLSEKERQIKKOTALVELVYKHKPKA 563
 OY 600 TKEQIKAVMDPFAAFVFKCCCKADDKETCFABEGKGLVAASQALGL 645
 DB 564 TKEQIKAVMDPFAAFVFKCCCKADDKETCFABEGKGLVAASQALGL 609

RESULT 11

US-08-433-037-4
 ; Sequence 4, Application US/08433037
 ; Patent No. 5707828
 ; GENERAL INFORMATION:
 ; APPLICANT: Sreekrishna, Kotikanyadan
 ; APPLICANT: Barr, Kathryn A.
 ; APPLICANT: Brietley, Russell A.
 ; APPLICANT: Thill, Gregory P.
 ; APPLICANT: Techopp, Juerg P.
 ; TITLE OF INVENTION: EXPRESSION OF HUMAN SERUM ALBUMIN IN
 ; NUMBER OF SEQUENCES: 19
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESS: Scully, Scott, Murphy & Presser
 ; STREET: 400 Garden City Plaza
 ; CITY: Garden City
 ; STATE: New York
 ; COUNTRY: U.S.A.
 ; ZIP: 11530-0299
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; OPERATING SYSTEM: IBM PC compatible
 ; SOFTWARE: Patentin Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/433,037
 ; FILING DATE: 03-MAY-1995
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: DiGiullo, Frank S.
 ; REGISTRATION NUMBER: 31,346
 ; REFERENCE/DOCKET NUMBER: 91082
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (516) 742-4343
 ; TELEFAX: (516) 742-4366
 ; TELEX: 230 901 SANS UR
 ; INFORMATION FOR SEQ ID NO: 4:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 609 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; US-08-433-037-4

Query Match 90.8%; Score 3104; DB 1; Length 609;
 Best Local Similarity 99.8%; Pred. No. 1.6e-277;
 Matches 585; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 60 RDAHSEVAHRRKDLGSENFKALVLAFAQYLQCCPEFDHVKLVNEVTEPAKTVAADSA 119

Db 24 RDAHKSEVAHRFKDGLGENFKALVLIAPAOYLQCCPEDEHVKLVNEVTEBAKTCVADESA 83
 Qy 120 ENCDKSIHTLPKGGKLCVATLRETYGEMADCCAKOBERNEBFLQHKDDPNLPRLVPE 179
 Db 84 ENCDKSIHTLPKGGKLCVATLRETYGEMADCCAKOBERNEBFLQHKDDPNLPRLVPE 143
 Qy 180 VDWMCSTAFHNDNEETFLKCYLYEYIARRRHPYFAPABELLFPARKRYKAFTTECCOADAADKAACL 239
 Db 144 VDWMCSTAFHNDNEETFLKCYLYEYIARRRHPYFAPABELLFPARKRYKAFTTECCOADAADKAACL 203
 Qy 240 PKIDELRDEBKASSAKORLKCASLQKGGERRAFKAWAVARLSORFPKAEFAVSKLVTDLT 299
 Db 204 PKIDELRDEBKASSAKORLKCASLQKGGERRAFKAWAVARLSORFPKAEFAVSKLVTDLT 263
 Qy 300 KVHTBCHGDLLECADRDADLAKYICENODSISSKLCCECEKPLLEKSHCIAEVENDEMP 359
 Db 264 KVHTBCHGDLLECADRDADLAKYICENODSISSKLCCECEKPLLEKSHCIAEVENDEMP 323
 Qy 360 ADLPSLAADPVESKDVCKNYAEAKDVFLEGMFLYEYARRHPDYSVLLLRLLAKTYETTLK 419
 Db 324 ADLPSLAADPVESKDVCKNYAEAKDVFLEGMFLYEYARRHPDYSVLLLRLLAKTYETTLK 383
 Qy 420 CCAAADPHECYAKVDFEFPKPLVEBPONLIKONCELEPDLGEGYKFNALLVRYTKKYPQVS 479
 Db 384 CCAAADPHECYAKVDFEFPKPLVEBPONLIKONCELEPDLGEGYKFNALLVRYTKKYPQVS 443
 Qy 480 TPPLVEVSRMLGKVGSKCCGHPPEAKMPCAEADYLSVLANQLCVLHEKTPVSDRVTKCTE 539
 Db 444 TPPLVEVSRMLGKVGSKCCGHPPEAKMPCAEADYLSVLANQLCVLHEKTPVSDRVTKCTE 503
 Qy 540 SLVNRRCFSALEVDFTYVPEKFNALFTFFHADICTLSEKERQIKKOTALVELVGHKPKA 599
 Db 504 SLVNRRCFSALEVDFTYVPEKFNALFTFFHADICTLSEKERQIKKOTALVELVGHKPKA 563
 Qy 600 TKEQLRKAVMDPFAAFVEKCCCKADDKETCFABEGKQLVAASQAALGL 645
 Db 564 TKEQLRKAVMDPFAAFVEKCCCKADDKETCFABEGKQLVAASQAALGL 609

RESULT 12

US-08-897-956A-2
 ; Sequence 2, Application US/08897956A
 ; Patent No. 6423512
 ; GENERAL INFORMATION:
 ; APPLICANT: Philip Ellen Digan
 ; APPLICANT: Mary Ellen Digan
 ; APPLICANT: Hermann Gram
 ; TITLE OF INVENTION: Fusion Polypeptides
 ; FILE REFERENCE: 600-7244/CPA
 ; CURRENT APPLICATION NUMBER: US/08/897, 956A
 ; PRIOR FILING DATE: 1997-07-21
 ; PRIOR APPLICATION NUMBER: 60/022, 689
 ; NUMBER OF SEQ ID NOS: 38
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 2
 ; LENGTH: 609
 ; TYPE: PRT
 ; ORGANISM: Homo Sapiens
 ; US-08-897-956A-2

Query Match 90.8%; Score 3104; DB 2; Length 609;
 Best Local Similarity 99.8%; Pred. No. 1.6e-277;
 Matches 585; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 60 RDAHKSEVAHRFKDGLGENFKALVLIAPAOYLQCCPEDEHVKLVNEVTEBAKTCVADESA 119
 Db 24 RDAHKSEVAHRFKDGLGENFKALVLIAPAOYLQCCPEDEHVKLVNEVTEBAKTCVADESA 83
 Qy 120 ENCDKSIHTLPKGGKLCVATLRETYGEMADCCAKOBERNEBFLQHKDDPNLPRLVPE 179
 Db 84 ENCDKSIHTLPKGGKLCVATLRETYGEMADCCAKOBERNEBFLQHKDDPNLPRLVPE 143

Qy 180 VDWMCSTAFHNDNEETFLKCYLYEYIARRRHPYFAPABELLFPARKRYKAFTTECCOADAADKAACL 239
 Db 144 VDWMCSTAFHNDNEETFLKCYLYEYIARRRHPYFAPABELLFPARKRYKAFTTECCOADAADKAACL 203
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 Db 204 PKIDELRDEBKASSAKORLKCASLQKGGERRAFKAWAVARLSORFPKAEFAVSKLVTDLT 263
 Qy 300 KVHTBCHGDLLECADRDADLAKYICENODSISSKLCCECEKPLLEKSHCIAEVENDEMP 359
 Db 264 KVHTBCHGDLLECADRDADLAKYICENODSISSKLCCECEKPLLEKSHCIAEVENDEMP 323
 Qy 360 ADLPSLAADPVESKDVCKNYAEAKDVFLEGMFLYEYARRHPDYSVLLLRLLAKTYETTLK 419
 Db 324 ADLPSLAADPVESKDVCKNYAEAKDVFLEGMFLYEYARRHPDYSVLLLRLLAKTYETTLK 383
 Qy 420 CCAAADPHECYAKVDFEFPKPLVEBPONLIKONCELEPDLGEGYKFNALLVRYTKKYPQVS 479
 Db 384 CCAAADPHECYAKVDFEFPKPLVEBPONLIKONCELEPDLGEGYKFNALLVRYTKKYPQVS 443
 Qy 480 TPPLVEVSRMLGKVGSKCCGHPPEAKMPCAEADYLSVLANQLCVLHEKTPVSDRVTKCTE 539
 Db 444 TPPLVEVSRMLGKVGSKCCGHPPEAKMPCAEADYLSVLANQLCVLHEKTPVSDRVTKCTE 503
 Qy 540 SLVNRRCFSALEVDFTYVPEKFNALFTFFHADICTLSEKERQIKKOTALVELVGHKPKA 599
 Db 504 SLVNRRCFSALEVDFTYVPEKFNALFTFFHADICTLSEKERQIKKOTALVELVGHKPKA 563
 Qy 600 TKEQLRKAVMDPFAAFVEKCCCKADDKETCFABEGKQLVAASQAALGL 645
 Db 564 TKEQLRKAVMDPFAAFVEKCCCKADDKETCFABEGKQLVAASQAALGL 609

RESULT 13

PCT-US95-04075-3
 ; Sequence 3, Application PC/TUS9504075
 ; GENERAL INFORMATION:
 ; APPLICANT: AMGEN INC.
 ; TITLE OF INVENTION: Afamin: A Human Serum Albumin-like
 ; TITLE OF INVENTION: Protein
 ; NUMBER OF SEQUENCES: 33
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Amgen Center, Patent Operations/RRC
 ; STREET: 1840 Dehavenland Drive
 ; CITY: Thousand Oaks
 ; STATE: California
 ; COUNTRY: U.S.
 ; ZIP: 91320-1789
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: PCT/US95/04075
 ; FILING DATE:
 ; CLASSIFICATION:
 ; INFORMATION FOR SEQ ID NO: 3:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 609 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: unknown
 ; TOPOLOGY: unknown
 ; MOLECULE TYPE: protein
 ; PCT-US95-04075-3

Query Match 90.8%; Score 3104; DB 4; Length 609;
 Best Local Similarity 99.8%; Pred. No. 1.6e-277;
 Matches 585; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 60 RDAHKSEVAHRFKDGLGENFKALVLIAPAOYLQCCPEDEHVKLVNEVTEBAKTCVADESA 119
 Db 24 RDAHKSEVAHRFKDGLGENFKALVLIAPAOYLQCCPEDEHVKLVNEVTEBAKTCVADESA 83

QY 120 ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEBERRRCEFLQHKDDNPNLPRLYRPE 179
 DB 84 ENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEBERRRCEFLQHKDDNPNLPRLYRPE 143
 QY 180 VDWVCTAFHNDNEETFLKCYLVEIARRHPYFYAPPELLFFAKRYKAAFTTECCOAAADKAACL 239
 DB 144 VDWVCTAFHNDNEETFLKCYLVEIARRHPYFYAPPELLFFAKRYKAAFTTECCOAAADKAACL 203
 QY 240 PKDLDELDEGKASSAKORLKCASIQKFGERRAFKAWAVARLSQRFPKABFAEVSQLVLDLT 299
 DB 204 PKDLDELDEGKASSAKORLKCASIQKFGERRAFKAWAVARLSQRFPKABFAEVSQLVLDLT 263
 QY 300 KPHTECHGDLLECADRDLAKYICENODSISSKLBCECKEPLLEKSHCIAVENBMP 359
 DB 264 KPHTECHGDLLECADRDLAKYICENODSISSKLBCECKEPLLEKSHCIAVENBMP 323
 QY 360 ADPLSLAADPVESKDVCKNYAABKDVFLGMPLYEYARRHPDYSVLLLRLLAKYETTLLEK 419
 DB 324 ADPLSLAADPVESKDVCKNYAABKDVFLGMPLYEYARRHPDYSVLLLRLLAKYETTLLEK 383
 QY 420 CCAAADPHECYAKVPDEFKPLVEBPONLIKONCELPOLGSEYKFNALLVRYTKKVPVS 479
 DB 384 CCAAADPHECYAKVPDEFKPLVEBPONLIKONCELPOLGSEYKFNALLVRYTKKVPVS 443
 QY 480 TPPLVYVSRNIGKYGSKCKKPKRMPKADYLSVVLNQLCVLHEKTPVSDRVTYKCTE 539
 DB 444 TPPLVYVSRNIGKYGSKCKKPKRMPKADYLSVVLNQLCVLHEKTPVSDRVTYKCTE 503
 QY 540 SLVNRRCFSALEVDYVYVPEKFNAPETTFPHADICTLSEKERQIKKQTPALVELYKHKPKA 599
 DB 504 SLVNRRCFSALEVDYVYVPEKFNAPETTFPHADICTLSEKERQIKKQTPALVELYKHKPKA 563
 QY 600 TKBQLKAVMDPFAAFVEKCKKADDKETCFABEGKKLVAASQALGL 645
 DB 564 TKBQLKAVMDPFAAFVEKCKKADDKETCFABEGKKLVAASQALGL 609
 RESULT 14
 US-08-956A-3
 ; Sequence 3, Application US/08897956A
 ; Patent No. 6423512
 ; GENERAL INFORMATION:
 ; APPLICANT: Mary Ellen Digan
 ; APPLICANT: Phillip Lake
 ; APPLICANT: Hermann Gram
 ; TITLE OF INVENTION: Fusion Polypeptides
 ; FILE REFERENCE: 600-7244/CPA
 ; CURRENT APPLICATION NUMBER: US/08/897,956A
 ; CURRENT FILING DATE: 1997-07-21
 ; PRIOR APPLICATION NUMBER: 60/022,689
 ; PRIOR FILING DATE: 1996-07-26
 ; NUMBER OF SEQ ID NOS: 38
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 3
 ; LENGTH: 978
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Fusion polypeptide
 US-08-956A-3

Query Match 90.8%; Score 3103.5; DB 2; Length 978;
 Best Local Similarity 98.8%; Pred. No. 3.6e-277;
 Matches 586; Conservative 1; Mismatches 3; Indels 3; Gaps 1;

QY 55 WLVR---GRDAHKSVARRPFDLGENRKAIVLTAFAQYLQCCPEEDHVKLWNEVTERAK 111
 DB 203 WLASGGSSDAHKSSVARRFKDLGSENRKALVLAFAQYLQCCPEEDHVKLWNEVTERAK 262
 QY 112 TCVADESANCDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEBERRRCEFLQHKDDNPN 171
 DB 263 TCVADESANCDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEBERRRCEFLQHKDDNPN 322

QY 172 LPRLYRPEVDVMTAFHNDNEETFLKCYLVEIARRHPYFYAPPELLFFAKRYKAAFTTECCO 231
 DB 323 LPRLYRPEVDVMTAFHNDNEETFLKCYLVEIARRHPYFYAPPELLFFAKRYKAAFTTECCO 382
 QY 232 ADKAACTLPLDLDELDEGKASSAKORLKCASIQKFGERRAFKAWAVARLSQRFPKABFAE 291
 DB 383 ADKAACTLPLDLDELDEGKASSAKORLKCASIQKFGERRAFKAWAVARLSQRFPKABFAE 442
 QY 292 SKLVTLTKPHTECHGDLLECADRDLAKYICENODSISSKLBCECKEPLLEKSHCIA 351
 DB 443 SKLVTLTKPHTECHGDLLECADRDLAKYICENODSISSKLBCECKEPLLEKSHCIA 502
 QY 352 EVNDEMPADLPSLAADPVESKDVCKNYAABKDVFLGMPLYEYARRHPDYSVLLLRLLAK 411
 DB 503 EVNDEMPADLPSLAADPVESKDVCKNYAABKDVFLGMPLYEYARRHPDYSVLLLRLLAK 562
 QY 412 TYETTLLEKCCAAADPHECYAKVPDEFKPLVEBPONLIKONCELPOLGSEYKFNALLVRY 471
 DB 563 TYETTLLEKCCAAADPHECYAKVPDEFKPLVEBPONLIKONCELPOLGSEYKFNALLVRY 622
 QY 472 TKKVPVSTPLVYVSRNIGKYGSKCKKPKRMPKADYLSVVLNQLCVLHEKTPVSD 531
 DB 623 TKKVPVSTPLVYVSRNIGKYGSKCKKPKRMPKADYLSVVLNQLCVLHEKTPVSD 682
 QY 532 RYTKCCTSESLVNRRCFSALEVDYVYVPEKFNAPETTFPHADICTLSEKERQIKKQTPALVE 591
 DB 683 RYTKCCTSESLVNRRCFSALEVDYVYVPEKFNAPETTFPHADICTLSEKERQIKKQTPALVE 742
 QY 592 LVKHKPKATKBOJKAVMDPFAAFVEKCKKADDKETCFABEGKKLVAASQALG 644
 DB 743 LVKHKPKATKBOJKAVMDPFAAFVEKCKKADDKETCFABEGKKLVAASQALG 795

RESULT 15
 US-08-153-799-14
 ; Sequence 14, Application US/08153799
 ; Patent No. 5766883
 ; GENERAL INFORMATION:
 ; APPLICANT: Ballance, David J
 ; APPLICANT: Goodley, Andrew R
 ; TITLE OF INVENTION: Polypeptides
 ; NUMBER OF SEQUENCES: 23
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: R Hain Swope, BOC Health Care Inc
 ; STREET: 100 Mountain Avenue
 ; CITY: Murray Hill
 ; STATE: New Jersey
 ; COUNTRY: USA
 ; ZIP: 07974
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/153,799
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/847975
 ; FILING DATE: 06-MAR-1992
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: GB 8909916.2
 ; FILING DATE: 29-APR-1989
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: PCT/GB90/00650
 ; FILING DATE: 26-APR-1990
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/775952
 ; FILING DATE: 29-OCT-1991
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Swope, R Hain

Job time : 42.7706 secs

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? REGISTRATION NUMBER: 24864
? REFERENCE/DOCKET NUMBER: 92H832
? TELECOMMUNICATION INFORMATION:
? TELEPHONE: (908) 665 2400
? TELEFAX: (908) 771 6159
? TELEX: 219484
? INFORMATION FOR SEQ ID NO: 14:
? SEQUENCE CHARACTERISTICS:
? LENGTH: 585 amino acids
? TYPE: amino acid
? TOPOLOGY: linear
? MOLECULE TYPE: protein
? HYPOTHETICAL: NO
? ORIGINAL SOURCE:
? ORGANISM: Homo sapiens
? FEATURE:
? NAME/KEY: Region
? LOCATION: 369..419
? OTHER INFORMATION: /note="Alternative C-termini of
? OTHER INFORMATION: HSA(1-n)"
? FEATURE:
? NAME/KEY: Region
? LOCATION: 1..585
? OTHER INFORMATION:
? OTHER INFORMATION: natural HSA"
US-08-153-799-14

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Query Match 90.8%; Score 3103; DB 1; Length 585;

Best Local Similarity 100.0%; Pred. No. 1.9e-277; Mismatches 0; Gaps 0;

Matches 585; Conservative 0; Indels 0;

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QY 61 DAHKEVAHRRFKDYEENFKALVLIAPAOYLQCCPFEDHVKLVNEVTEFAKTCVADESAAE 120
DB 1 DAHKEVAHRRFKDYEENFKALVLIAPAOYLQCCPFEDHVKLVNEVTEFAKTCVADESAAE 60
QY 121 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPERNNGCFLQHKDNDPVLPRIVRPEV 180
DB 61 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPERNNGCFLQHKDNDPVLPRIVRPEV 120
QY 181 DVMCTAHDNDPEETLKKYLYEIAARRHPYPAPELLFFAKRYKAAFTCCOAAADKAACLTP 240
DB 121 DVMCTAHDNDPEETLKKYLYEIAARRHPYPAPELLFFAKRYKAAFTCCOAAADKAACLTP 180
QY 241 KLDELRDDEGKASAKORLKCASLQFGSRAPKAWAVARLSQRFPKAEFAEYVKLVTDLTK 300
DB 181 KLDELRDDEGKASAKORLKCASLQFGSRAPKAWAVARLSQRFPKAEFAEYVKLVTDLTK 240
QY 301 VHTCCGGDILLECADRDADLAKYICENQDSSISKLKECCCKPLLEKSHCIAEVNDMPA 360
DB 241 VHTCCGGDILLECADRDADLAKYICENQDSSISKLKECCCKPLLEKSHCIAEVNDMPA 300
QY 361 DLPSLIADPVESSKQVCKNVAARAKDVLGMLPEYVARRHPDYSVVLLRLAKTYETTLK 420
DB 301 DLPSLIADPVESSKQVCKNVAARAKDVLGMLPEYVARRHPDYSVVLLRLAKTYETTLK 360
QY 421 CAADDPHECYAKVDFEFPKLVIEEPONLIKONCELFEOQAGEYKFNQALLVRYTKKVPQVST 480
DB 361 CAADDPHECYAKVDFEFPKLVIEEPONLIKONCELFEOQAGEYKFNQALLVRYTKKVPQVST 420
QY 481 PTLVEVSRNLGKVGSKCKHPPEAKRMPCAEDYLSVTLNQLCVLHKEKTPVSDRVTKCCTES 540
DB 421 PTLVEVSRNLGKVGSKCKHPPEAKRMPCAEDYLSVTLNQLCVLHKEKTPVSDRVTKCCTES 480
QY 541 LVNRRPCCSALAEVDVETVYVPEKFNAAETFFHADICTLSEKERQIKKQTPALVELVHKHKPKAT 600
DB 481 LVNRRPCCSALAEVDVETVYVPEKFNAAETFFHADICTLSEKERQIKKQTPALVELVHKHKPKAT 540
QY 601 KEQLKAVMDPFAAFVYKCCKADDKETCFAEFGKKLVAAASQALGI 645
DB 541 KEQLKAVMDPFAAFVYKCCKADDKETCFAEFGKKLVAAASQALGI 585

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GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 19, 2006, 12:29:13 ; Search time 136.055 Seconds
(without alignments)
1980.821 Million cell updates/sec

Title: US-10-775-180-447_COPY_30_674

Perfect score: 1 HEGSTFTSDVSSVYEGQAAR.....TCFAEBEKQKLVAAASQALGL 645

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA Main:*

- 1: /cgn2_6/ptodata/1/pubpaa/US07_PUBSCOMB.pep:*
- 2: /cgn2_6/ptodata/1/pubpaa/US08_PUBSCOMB.pep:*
- 3: /cgn2_6/ptodata/1/pubpaa/US09_PUBSCOMB.pep:*
- 4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBSCOMB.pep:*
- 5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBSCOMB.pep:*
- 6: /cgn2_6/ptodata/1/pubpaa/US11_PUBSCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3417	100.0	662	5	US-10-775-180-611 Sequence 611, App
2	3417	100.0	662	5	US-10-775-204-1623 Sequence 1623, App
3	3417	100.0	663	5	US-10-775-180-600 Sequence 600, App
4	3417	100.0	663	5	US-10-775-204-1609 Sequence 1609, App
5	3417	100.0	664	5	US-10-775-180-598 Sequence 598, App
6	3417	100.0	664	5	US-10-775-204-1607 Sequence 1607, App
7	3417	100.0	668	5	US-10-775-180-609 Sequence 609, App
8	3417	100.0	668	5	US-10-775-204-1621 Sequence 1621, App
9	3417	100.0	669	5	US-10-775-180-419 Sequence 419, App
10	3417	100.0	669	5	US-10-775-204-1231 Sequence 1231, App
11	3417	100.0	674	5	US-10-775-180-447 Sequence 447, App
12	3417	100.0	674	5	US-10-775-204-1280 Sequence 1280, App
13	3417	100.0	730	5	US-10-775-180-610 Sequence 610, App
14	3417	100.0	730	5	US-10-775-204-1622 Sequence 1622, App
15	3411	99.8	662	5	US-10-775-180-614 Sequence 614, App
16	3411	99.8	662	5	US-10-775-204-1626 Sequence 1626, App
17	3411	99.8	663	5	US-10-775-180-601 Sequence 601, App
18	3411	99.8	663	5	US-10-775-204-1610 Sequence 1610, App
19	3411	99.8	664	5	US-10-775-180-599 Sequence 599, App
20	3411	99.8	664	5	US-10-775-204-1608 Sequence 1608, App
21	3411	99.8	668	5	US-10-775-180-613 Sequence 613, App
22	3411	99.8	668	5	US-10-775-204-1625 Sequence 1625, App
23	3411	99.8	669	5	US-10-775-180-425 Sequence 425, App
24	3411	99.8	669	5	US-10-775-204-1237 Sequence 1237, App
25	3411	99.8	730	5	US-10-775-180-612 Sequence 612, App
26	3411	99.8	730	5	US-10-775-204-1624 Sequence 1624, App
27	3405	99.6	669	5	US-10-775-180-420 Sequence 420, App

Result No.	Score	Query Match	Length	DB ID	Description
28	3405	99.6	669	5	US-10-775-180-421 Sequence 421, App
29	3405	99.6	669	5	US-10-775-180-423 Sequence 423, App
30	3405	99.6	669	5	US-10-775-180-424 Sequence 424, App
31	3405	99.6	669	5	US-10-775-204-1232 Sequence 1232, App
32	3405	99.6	669	5	US-10-775-204-1233 Sequence 1233, App
33	3405	99.6	669	5	US-10-775-204-1235 Sequence 1235, App
34	3405	99.6	669	5	US-10-775-180-4226 Sequence 1226, App
35	3397	99.4	667	5	US-10-775-180-4222 Sequence 4222, App
36	3397	99.4	667	5	US-10-775-204-1234 Sequence 1234, App
37	3265	95.6	639	5	US-10-775-180-1311 Sequence 1311, App
38	3265	95.6	639	5	US-10-775-204-417 Sequence 417, App
39	3259	95.4	639	5	US-10-775-180-129 Sequence 129, App
40	3259	95.4	639	5	US-10-775-204-1129 Sequence 1129, App
41	3259	95.4	700	5	US-10-775-180-4114 Sequence 4114, App
42	3250.5	95.1	654	5	US-10-775-180-574 Sequence 574, App
43	3250.5	95.1	654	5	US-10-775-204-1559 Sequence 1559, App
44	3248	95.1	655	5	US-10-775-180-623 Sequence 623, App
45	3248	95.1	655	5	US-10-775-204-1640 Sequence 1640, App

ALIGNMENTS

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RESULT 1
US-10-775-180-611
: Sequence 611, Application US/10775180
: Publication No. US20050054570A1
: GENERAL INFORMATION:
: APPLICANT: Rosen, Craig A.
: APPLICANT: Haseltine, William A.
: TITLE OF INVENTION: Albumin Fusion Proteins
: FILE REFERENCE: P574
: CURRENT APPLICATION NUMBER: US/10/775, 180
: PRIOR FILING DATE: 2004-02-11
: PRIOR FILING DATE: 2002-12-23
: PRIOR FILING DATE: 2002-12-23
: PRIOR FILING DATE: 2001-12-21
: PRIOR FILING DATE: 2002-02-28
: PRIOR FILING DATE: 2001-12-21
: PRIOR FILING DATE: 2002-05-10
: PRIOR FILING DATE: 2002-05-10
: PRIOR FILING DATE: 2002-07-24
: PRIOR FILING DATE: 2002-07-24
: PRIOR FILING DATE: 2002-09-18
: PRIOR FILING DATE: 2002-09-18
: PRIOR FILING DATE: 2002-10-02
: PRIOR FILING DATE: 2002-10-02
: PRIOR FILING DATE: 2002-10-11
: PRIOR FILING DATE: 2002-10-11
: PRIOR FILING DATE: 2002-10-23
: PRIOR FILING DATE: 2002-10-23
: PRIOR FILING DATE: 2002-11-05
: PRIOR FILING DATE: 2002-11-05
: Remaining Prior Application data removed - See File Wrapper or PALM.
: NUMBER OF SEQ ID NOS: 858
: SOFTWARE: PatentIn Ver. 2.0
: SEQ ID NO 611
: LENGTH: 662
: TYPE: PRT
: ORGANISM: Homo sapiens
:
Query Match 100.0%; Score 3417; DB 5; Length 662;
Best Local Similarity 100.0%; Pred. No. 3.6e-259; Indels 0; Gaps 0;
Matches 645; Conserative 0; Mismatches 0;
OY 1 HEGSTFTSDVSSVYEGQAARFLAMLVKGRHGGSTFTSDVSSVYEGQAARFLAMLVKGR 60
DB 18 HEGSTFTSDVSSVYEGQAARFLAMLVKGRHGGSTFTSDVSSVYEGQAARFLAMLVKGR 77
OY 61 DAHSEVAHRPKDLEGENFKALVLIAPFAQYIQCFEDHVKLVNEVTEPAKTCVADESAAE 120

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Db DAHSEVAHRFKDLGSENFKALVLIAPAOYLQCCPFEDHVKLVNEVTEPRAKTCVADBSAE 137
Qy NCDKSIHTLFGDKLCTVAATLRETYGEMADCCAKQEBERNECFLOHKDNDPRLVLRPEV 180
Db NCDKSIHTLFGDKLCTVAATLRETYGEMADCCAKQEBERNECFLOHKDNDPRLVLRPEV 197
Qy DVNCTAFHNDNEETFLKKYLYEARRRHPYFAPABLLFPAPKRYKAAFTPECQOADKAAKCLLP 240
Db DVNCTAFHNDNEETFLKKYLYEARRRHPYFAPABLLFPAPKRYKAAFTPECQOADKAAKCLLP 257
Qy KDLDELDEGKASSAKORLKCASLQKFGERRAFKMAVAARLSQRPKAPFAVSKLVTDLTK 300
Db KDLDELDEGKASSAKORLKCASLQKFGERRAFKMAVAARLSQRPKAPFAVSKLVTDLTK 317
Qy VHTTECGDILLECGADDRADLAKYICENQDISSSKLECCCKPILKESHCIABVENDMPA 360
Db VHTTECGDILLECGADDRADLAKYICENQDISSSKLECCCKPILKESHCIABVENDMPA 377
Qy DLPSLAADPVESKDVCKNVAEAKDVFQGMFLYFYARRRHPDYSVVLLRLAKYETTLK 420
Db DLPSLAADPVESKDVCKNVAEAKDVFQGMFLYFYARRRHPDYSVVLLRLAKYETTLK 437
Qy CAAADPHECYAKYFDEPKPLVEEPONLTKONCELFEGDGEYKFNALLVRYTKVPOVST 480
Db CAAADPHECYAKYFDEPKPLVEEPONLTKONCELFEGDGEYKFNALLVRYTKVPOVST 497
Qy PTLVSRNIGKVGSKCKKHPBAKMPACADYLSVNLQCVLHEKTPVSDRVTKCTES 540
Db PTLVSRNIGKVGSKCKKHPBAKMPACADYLSVNLQCVLHEKTPVSDRVTKCTES 557
Qy LVNRRPCFSALVEDETYVPKRFNAETFTFHADICTLSEKERQIKKQTAVALVELYKHKPKAT 600
Db LVNRRPCFSALVEDETYVPKRFNAETFTFHADICTLSEKERQIKKQTAVALVELYKHKPKAT 617
Qy KEQKAVMDPFAAFVKEKCCADDKETCFABEGKKLVAAASQALGL 645
Db KEQKAVMDPFAAFVKEKCCADDKETCFABEGKKLVAAASQALGL 662

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RESULT 2

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US-10-775-204-1623
; Sequence 1623, Application US/10775204
; Publication No. US2005018664A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; APPLICANT: Balance, David J.
; APPLICANT: Turner, Andrew J.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: P564
; CURRENT APPLICATION NUMBER: US/10/775, 204
; CURRENT FILING DATE: 2004-02-11
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See file wrapper or PAM.

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; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 1623
; LENGTH: 662
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-775-204-1623
Query Match 100.0%; Score 3417; DB 5; Length 662;
Best Local Similarity 100.0%; Pred. No. 3,6e-259;
Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 HGEGTPTSDVSSYLEEQAAKEPFAVYKGRHGEFTSDVSSYLEQAAKEPFAVYKGR 60
Db HGEGTPTSDVSSYLEEQAAKEPFAVYKGRHGEFTSDVSSYLEQAAKEPFAVYKGR 77
Qy DAHSEVAHRFKDLGSENFKALVLIAPAOYLQCCPFEDHVKLVNEVTEPRAKTCVADBSAE 120
Db DAHSEVAHRFKDLGSENFKALVLIAPAOYLQCCPFEDHVKLVNEVTEPRAKTCVADBSAE 137
Qy NCDKSIHTLFGDKLCTVAATLRETYGEMADCCAKQEBERNECFLOHKDNDPRLVLRPEV 180
Db NCDKSIHTLFGDKLCTVAATLRETYGEMADCCAKQEBERNECFLOHKDNDPRLVLRPEV 197
Qy DVNCTAFHNDNEETFLKKYLYEARRRHPYFAPABLLFPAPKRYKAAFTPECQOADKAAKCLLP 240
Db DVNCTAFHNDNEETFLKKYLYEARRRHPYFAPABLLFPAPKRYKAAFTPECQOADKAAKCLLP 257
Qy KDLDELDEGKASSAKORLKCASLQKFGERRAFKMAVAARLSQRPKAPFAVSKLVTDLTK 300
Db KDLDELDEGKASSAKORLKCASLQKFGERRAFKMAVAARLSQRPKAPFAVSKLVTDLTK 317
Qy VHTTECGDILLECGADDRADLAKYICENQDISSSKLECCCKPILKESHCIABVENDMPA 360
Db VHTTECGDILLECGADDRADLAKYICENQDISSSKLECCCKPILKESHCIABVENDMPA 377
Qy DLPSLAADPVESKDVCKNVAEAKDVFQGMFLYFYARRRHPDYSVVLLRLAKYETTLK 420
Db DLPSLAADPVESKDVCKNVAEAKDVFQGMFLYFYARRRHPDYSVVLLRLAKYETTLK 437
Qy CAAADPHECYAKYFDEPKPLVEEPONLTKONCELFEGDGEYKFNALLVRYTKVPOVST 480
Db CAAADPHECYAKYFDEPKPLVEEPONLTKONCELFEGDGEYKFNALLVRYTKVPOVST 497
Qy PTLVSRNIGKVGSKCKKHPBAKMPACADYLSVNLQCVLHEKTPVSDRVTKCTES 540
Db PTLVSRNIGKVGSKCKKHPBAKMPACADYLSVNLQCVLHEKTPVSDRVTKCTES 557
Qy LVNRRPCFSALVEDETYVPKRFNAETFTFHADICTLSEKERQIKKQTAVALVELYKHKPKAT 600
Db LVNRRPCFSALVEDETYVPKRFNAETFTFHADICTLSEKERQIKKQTAVALVELYKHKPKAT 617
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Db KEQKAVMDPFAAFVKEKCCADDKETCFABEGKKLVAAASQALGL 662

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RESULT 3

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US-10-775-180-600
; Sequence 600, Application US/10775180
; Publication No. US20050054570A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: P574
; CURRENT APPLICATION NUMBER: US/10/775, 180
; CURRENT FILING DATE: 2004-02-11
; PRIOR APPLICATION NUMBER: PCT/US02/40892
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000

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PRIOR FILING DATE: 2002-02-28
 PRIOR APPLICATION NUMBER: 60/3378, 950
 PRIOR FILING DATE: 2002-05-10
 PRIOR APPLICATION NUMBER: 60/398, 008
 PRIOR FILING DATE: 2002-07-24
 PRIOR APPLICATION NUMBER: 60/411, 355
 PRIOR FILING DATE: 2002-09-18
 PRIOR APPLICATION NUMBER: 60/414, 984
 PRIOR FILING DATE: 2002-10-02
 PRIOR APPLICATION NUMBER: 60/417, 611
 PRIOR FILING DATE: 2002-10-11
 PRIOR APPLICATION NUMBER: 60/420, 246
 PRIOR FILING DATE: 2002-10-23
 PRIOR APPLICATION NUMBER: 60/423, 623
 PRIOR FILING DATE: 2002-11-05
 Remaining Prior Application data removed - See file wrapper or PAM.
 NUMBER OF SEQ ID NOS: 858
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 600
 LENGTH: 663
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-10-775-180-600

Query Match 100.0%; Score 3417; DB 5; Length 663;
 Best Local Similarity 100.0%; Pred. No. 3,6e-259;
 Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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 19 HGEFTFSDVSSYLEGQAQAEFIAMLVKGRHGEFTFSDVSSYLEGQAQAEFIAMLVKGR 78
 61 DAHSEVAHNRKDKGSENFKALVLIARFQYIQQCFEFDHVKLVNEVTEPAKTCVAADSSAE 120
 79 DAHSEVAHNRKDKGSENFKALVLIARFQYIQQCFEFDHVKLVNEVTEPAKTCVAADSSAE 138
 121 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPERNIECFLOHKDNPMLPRLVREPV 180
 139 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPERNIECFLOHKDNPMLPRLVREPV 198
 181 DVMCTAFHNDNETFLKLYLIEIARRHPYFVAPBELLFPAKRYKAAFTRECCQAADKAACLLP 240
 199 DVMCTAFHNDNETFLKLYLIEIARRHPYFVAPBELLFPAKRYKAAFTRECCQAADKAACLLP 258
 241 KLDLIRDEGKASSAKQRLKCSLQKFGERRAFKAWAVARLSQRPFAEFAVYSKLVTDLTK 300
 259 KLDLIRDEGKASSAKQRLKCSLQKFGERRAFKAWAVARLSQRPFAEFAVYSKLVTDLTK 318
 301 VHTTECGHDDLCEADRDADLAKYIICENQDSTSSKLCCEKPELLEKSHCIAEVENDEMPA 360
 319 VHTTECGHDDLCEADRDADLAKYIICENQDSTSSKLCCEKPELLEKSHCIAEVENDEMPA 378
 361 DLPSIAADFVSKVCKVYAEAKQVFLGMFLYERARRHPDYSVVLLRLAKTYETTTLEKC 420
 379 DLPSIAADFVSKVCKVYAEAKQVFLGMFLYERARRHPDYSVVLLRLAKTYETTTLEKC 438
 421 CAADPHNCEYAKVPEFKPLVEBPONLTKONCELFQEGEYKFNALLVRYTKYPOVST 480
 439 CAADPHNCEYAKVPEFKPLVEBPONLTKONCELFQEGEYKFNALLVRYTKYPOVST 498
 481 PTLVSVSRNLGKVGSKCKKHPRAKMPCAEDVLSVLLVQLCVLHKRTVSDVNYCCSBS 540
 499 PTLVSVSRNLGKVGSKCKKHPRAKMPCAEDVLSVLLVQLCVLHKRTVSDVNYCCSBS 558
 541 LVNRRPFSALREVDSTVYKPEFNAETFTFHADICTLSEKEROIKKQTLVLELVKRPYAT 600
 559 LVNRRPFSALREVDSTVYKPEFNAETFTFHADICTLSEKEROIKKQTLVLELVKRPYAT 618
 601 KEQLKAVMDPFAAFAVEKCCKADKKTCPAEBEGKCLVAASQAALGL 645
 619 KEQLKAVMDPFAAFAVEKCCKADKKTCPAEBEGKCLVAASQAALGL 663

RESULT 4

US-10-775-204-1609
 Sequence 1609, Application US/10775204
 Publication No. US20050186664A1
 GENERAL INFORMATION:
 APPLICANT: Rosen, Craig A.
 APPLICANT: Haseltine, William A.
 APPLICANT: Balance, David J.
 APPLICANT: Turner, Andrew J.
 TITLE OR INVENTION: Albumin Fusion Proteins
 FILE REFERENCE: PFS64
 CURRENT APPLICATION NUMBER: US/10/775, 204
 PRIOR APPLICATION NUMBER: 60/341, 811
 PRIOR FILING DATE: 2001-12-21
 PRIOR APPLICATION NUMBER: 60/360, 000
 PRIOR FILING DATE: 2002-02-28
 PRIOR APPLICATION NUMBER: 60/378, 950
 PRIOR FILING DATE: 2002-05-10
 PRIOR APPLICATION NUMBER: 60/398, 008
 PRIOR FILING DATE: 2002-07-24
 PRIOR APPLICATION NUMBER: 60/411, 355
 PRIOR FILING DATE: 2002-09-18
 PRIOR APPLICATION NUMBER: 60/414, 984
 PRIOR FILING DATE: 2002-10-02
 PRIOR APPLICATION NUMBER: 60/417, 611
 PRIOR FILING DATE: 2002-10-11
 PRIOR APPLICATION NUMBER: 60/420, 246
 PRIOR FILING DATE: 2002-10-23
 PRIOR APPLICATION NUMBER: 60/423, 623
 PRIOR FILING DATE: 2002-11-05
 PRIOR APPLICATION NUMBER: 60/351, 360
 Remaining Prior Application data removed - See file wrapper or PAM.
 NUMBER OF SEQ ID NOS: 2222
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 1609
 LENGTH: 663
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-10-775-204-1609

Query Match 100.0%; Score 3417; DB 5; Length 663;
 Best Local Similarity 100.0%; Pred. No. 3,6e-259;
 Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 HGEFTFSDVSSYLEGQAQAEFIAMLVKGRHGEFTFSDVSSYLEGQAQAEFIAMLVKGR 60
 19 HGEFTFSDVSSYLEGQAQAEFIAMLVKGRHGEFTFSDVSSYLEGQAQAEFIAMLVKGR 78
 61 DAHSEVAHNRKDKGSENFKALVLIARFQYIQQCFEFDHVKLVNEVTEPAKTCVAADSSAE 120
 79 DAHSEVAHNRKDKGSENFKALVLIARFQYIQQCFEFDHVKLVNEVTEPAKTCVAADSSAE 138
 121 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPERNIECFLOHKDNPMLPRLVREPV 180
 139 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPERNIECFLOHKDNPMLPRLVREPV 198
 181 DVMCTAFHNDNETFLKLYLIEIARRHPYFVAPBELLFPAKRYKAAFTRECCQAADKAACLLP 240
 199 DVMCTAFHNDNETFLKLYLIEIARRHPYFVAPBELLFPAKRYKAAFTRECCQAADKAACLLP 258
 241 KLDLIRDEGKASSAKQRLKCSLQKFGERRAFKAWAVARLSQRPFAEFAVYSKLVTDLTK 300
 259 KLDLIRDEGKASSAKQRLKCSLQKFGERRAFKAWAVARLSQRPFAEFAVYSKLVTDLTK 318
 301 VHTTECGHDDLCEADRDADLAKYIICENQDSTSSKLCCEKPELLEKSHCIAEVENDEMPA 360
 319 VHTTECGHDDLCEADRDADLAKYIICENQDSTSSKLCCEKPELLEKSHCIAEVENDEMPA 378
 361 DLPSIAADFVSKVCKVYAEAKQVFLGMFLYERARRHPDYSVVLLRLAKTYETTTLEKC 420
 379 DLPSIAADFVSKVCKVYAEAKQVFLGMFLYERARRHPDYSVVLLRLAKTYETTTLEKC 438

QY 421 CAAADPHECYAKVDFEKP... 480
 DB 439 CAAADPHECYAKVDFEKP... 498
 QY 481 PTLVEVSRNLGKYGSKCK... 540
 DB 499 PTLVEVSRNLGKYGSKCK... 558
 QY 541 LVNRRPCFSALEVD... 600
 DB 559 LVNRRPCFSALEVD... 618
 QY 601 KEOLKAVMDPFAA... 645
 DB 619 KEOLKAVMDPFAA... 663

RESULT 5
 US-10-775-180-598
 ; Sequence 598, Application US/10775180
 ; Publication No. US20050054570A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Rosen, Craig A.
 ; APPLICANT: Habeline, William A.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PFS74
 ; CURRENT APPLICATION NUMBER: US/10/775, 180
 ; PRIOR APPLICATION NUMBER: PCT/US02/40892
 ; PRIOR FILING DATE: 2002-02-11
 ; PRIOR FILING DATE: 2002-12-23
 ; PRIOR APPLICATION NUMBER: 60/341,811
 ; PRIOR FILING DATE: 2001-12-21
 ; PRIOR APPLICATION NUMBER: 60/360,000
 ; PRIOR FILING DATE: 2002-02-28
 ; PRIOR APPLICATION NUMBER: 60/378,950
 ; PRIOR FILING DATE: 2002-05-10
 ; PRIOR APPLICATION NUMBER: 60/398,008
 ; PRIOR FILING DATE: 2002-07-24
 ; PRIOR APPLICATION NUMBER: 60/411,355
 ; PRIOR FILING DATE: 2002-09-18
 ; PRIOR APPLICATION NUMBER: 60/414,984
 ; PRIOR FILING DATE: 2002-10-02
 ; PRIOR APPLICATION NUMBER: 60/417,611
 ; PRIOR FILING DATE: 2002-10-11
 ; PRIOR APPLICATION NUMBER: 60/420,246
 ; PRIOR FILING DATE: 2002-10-23
 ; PRIOR APPLICATION NUMBER: 60/423,623
 ; PRIOR FILING DATE: 2002-11-05
 ; Remaining Prior Application data removed - See File Wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 858
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 598
 ; LENGTH: 664
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-10-775-180-598

Query Match 100.0%; Score 3417; DB 5; Length 664;
 Best Local Similarity 100.0%; Pred. No. 3.6e-259;
 Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HGEGFTSDVSSYLEGQAK... 60
 DB 20 HGEGFTSDVSSYLEGQAK... 79
 QY 61 DAHSEVAHRFKD... 120
 DB 80 DAHSEVAHRFKD... 139
 QY 121 NCDXS... 180
 DB 140 NCDXS... 199

QY 181 DVWC... 240
 DB 200 DVWC... 259
 QY 241 KDEL... 300
 DB 260 KDEL... 319
 QY 301 VHT... 360
 DB 320 VHT... 379
 QY 361 DLPS... 420
 DB 380 DLPS... 439
 QY 421 CAAADPHECYAKVDFEKP... 480
 DB 440 CAAADPHECYAKVDFEKP... 499
 QY 481 PTLVEVSRNLGKYGSKCK... 540
 DB 500 PTLVEVSRNLGKYGSKCK... 559
 QY 541 LVNRRPCFSALEVD... 600
 DB 560 LVNRRPCFSALEVD... 619
 QY 601 KEOLKAVMDPFAA... 645
 DB 620 KEOLKAVMDPFAA... 664

RESULT 6
 US-10-775-204-1607
 ; Sequence 1607, Application US/10775204
 ; Publication No. US2005018664A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Rosen, Craig A.
 ; APPLICANT: Habeline, William A.
 ; APPLICANT: Balance, David J.
 ; APPLICANT: Turner, Andrew J.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PFS64
 ; CURRENT APPLICATION NUMBER: US/10/775,204
 ; CURRENT FILING DATE: 2004-02-11
 ; PRIOR APPLICATION NUMBER: 60/341,811
 ; PRIOR FILING DATE: 2001-12-21
 ; PRIOR APPLICATION NUMBER: 60/360,000
 ; PRIOR FILING DATE: 2002-02-28
 ; PRIOR APPLICATION NUMBER: 60/378,950
 ; PRIOR FILING DATE: 2002-05-10
 ; PRIOR APPLICATION NUMBER: 60/398,008
 ; PRIOR FILING DATE: 2002-07-24
 ; PRIOR APPLICATION NUMBER: 60/411,355
 ; PRIOR FILING DATE: 2002-09-18
 ; PRIOR APPLICATION NUMBER: 60/414,984
 ; PRIOR FILING DATE: 2002-10-02
 ; PRIOR APPLICATION NUMBER: 60/417,611
 ; PRIOR FILING DATE: 2002-10-11
 ; PRIOR APPLICATION NUMBER: 60/420,246
 ; PRIOR FILING DATE: 2002-10-23
 ; PRIOR APPLICATION NUMBER: 60/423,623
 ; PRIOR FILING DATE: 2002-11-05
 ; PRIOR APPLICATION NUMBER: 60/351,360
 ; Remaining Prior Application data removed - See File Wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 2222
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 1607
 ; LENGTH: 664
 ; TYPE: PRT

Query Match 100.0%; Score 3417; DB 5; Length 664;
 Best Local Similarity 100.0%; Pred. No. 3.6e-259;
 Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HGEGFTSDVSSYLEGQAK... 60
 DB 20 HGEGFTSDVSSYLEGQAK... 79
 QY 61 DAHSEVAHRFKD... 120
 DB 80 DAHSEVAHRFKD... 139
 QY 121 NCDXS... 180
 DB 140 NCDXS... 199

ORGANISM: Homo sapiens
US-10-775-204-1607

Query Match 100.0%; Score 3417; DB 5; Length 664;
Best Local Similarity 100.0%; Pred. No. 3,6e-259; Indels 0; Gaps 0;
Matches 645; Conservative 0; Mismatches 0;

1 HGEETFTSDVSSYLEGQAAKEFTIAMIYKGRHGEETFTSDVSSYLEGQAAKEFTIAMIYKGR 60
20 HGEETFTSDVSSYLEGQAAKEFTIAMIYKGRHGEETFTSDVSSYLEGQAAKEFTIAMIYKGR 79
61 DAHSEVAHNRKPDGEBENFKALVLIARFQYLQCCPFEDHVKLVNVEVTEFAKTCVADBSAE 120
80 DAHSEVAHNRKPDGEBENFKALVLIARFQYLQCCPFEDHVKLVNVEVTEFAKTCVADBSAE 139
121 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPERNCEFLQHKDNDNPLRLVREPV 180
140 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPERNCEFLQHKDNDNPLRLVREPV 199
181 DVMCTAHDNEETFLKYLVEIARRHPYFAPBELLFPAKRYKAAFTCCOAAADKAACLTP 240
200 DVMCTAHDNEETFLKYLVEIARRHPYFAPBELLFPAKRYKAAFTCCOAAADKAACLTP 259
241 KLDELREBGRKASSAKQRLKASLQKFGERRAFKMAVAARLSQRPPKAEFAVSKLVTDLTK 300
260 KLDELREBGRKASSAKQRLKASLQKFGERRAFKMAVAARLSQRPPKAEFAVSKLVTDLTK 319
301 VHTCECHGDLLECADDRADLAKYICENQDISISSKLEKCECKRPLLEKSHCIAEVENDEMPA 360
320 VHTCECHGDLLECADDRADLAKYICENQDISISSKLEKCECKRPLLEKSHCIAEVENDEMPA 379
361 DLPSLAADPVESKDVCKNVAEAKDVFGLGMLFYEARRRHPDYSVLLLRLLAKTYETTLK 420
380 DLPSLAADPVESKDVCKNVAEAKDVFGLGMLFYEARRRHPDYSVLLLRLLAKTYETTLK 439
421 CAADPHECYAKVDFEFLKYLVEIARRHPYFAPBELLFPAKRYKAAFTCCOAAADKAACLTP 480
440 CAADPHECYAKVDFEFLKYLVEIARRHPYFAPBELLFPAKRYKAAFTCCOAAADKAACLTP 499
481 PTLVEVSRLNIGKVSCKCKHPBEAKRMPCAEDYLSVNLQCVLHEKTPVSDRVTKCTES 540
500 PTLVEVSRLNIGKVSCKCKHPBEAKRMPCAEDYLSVNLQCVLHEKTPVSDRVTKCTES 559
541 LVNRRPCFSALAEVDETVVPKFNAPETFPHADICTLSKERQIKKQTAALVELVGRKPKAT 600
560 LVNRRPCFSALAEVDETVVPKFNAPETFPHADICTLSKERQIKKQTAALVELVGRKPKAT 619
601 KEQLKAVMDPFAAFVKEKCCAKADDKETCFABEGSKLVAAASQAALGL 645
620 KEQLKAVMDPFAAFVKEKCCAKADDKETCFABEGSKLVAAASQAALGL 664

RESULT 7

Sequence 609, Application US/10775180
Publication No. US20050054570A1
GENERAL INFORMATION:
APPLICANT: Haseltine, Craig A.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PFS74
CURRENT APPLICATION NUMBER: US/10/775, 180
PRIOR FILING DATE: 2004-02-11
PRIOR APPLICATION NUMBER: PCT/US02/40892
PRIOR FILING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: 60/341, 811
PRIOR FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 60/360, 000
PRIOR FILING DATE: 2002-02-28
PRIOR APPLICATION NUMBER: 60/378, 950
PRIOR FILING DATE: 2002-05-10
PRIOR APPLICATION NUMBER: 60/398, 008
PRIOR FILING DATE: 2002-07-24

ORGANISM: Homo sapiens
US-10-775-180-609

Query Match 100.0%; Score 3417; DB 5; Length 668;
Best Local Similarity 100.0%; Pred. No. 3,6e-259; Indels 0; Gaps 0;
Matches 645; Conservative 0; Mismatches 0;

1 HGEETFTSDVSSYLEGQAAKEFTIAMIYKGRHGEETFTSDVSSYLEGQAAKEFTIAMIYKGR 60
24 HGEETFTSDVSSYLEGQAAKEFTIAMIYKGRHGEETFTSDVSSYLEGQAAKEFTIAMIYKGR 83
61 DAHSEVAHNRKPDGEBENFKALVLIARFQYLQCCPFEDHVKLVNVEVTEFAKTCVADBSAE 120
84 DAHSEVAHNRKPDGEBENFKALVLIARFQYLQCCPFEDHVKLVNVEVTEFAKTCVADBSAE 143
121 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPERNCEFLQHKDNDNPLRLVREPV 180
144 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPERNCEFLQHKDNDNPLRLVREPV 203
181 DVMCTAHDNEETFLKYLVEIARRHPYFAPBELLFPAKRYKAAFTCCOAAADKAACLTP 240
204 DVMCTAHDNEETFLKYLVEIARRHPYFAPBELLFPAKRYKAAFTCCOAAADKAACLTP 263
241 KLDELREBGRKASSAKQRLKASLQKFGERRAFKMAVAARLSQRPPKAEFAVSKLVTDLTK 300
264 KLDELREBGRKASSAKQRLKASLQKFGERRAFKMAVAARLSQRPPKAEFAVSKLVTDLTK 323
301 VHTCECHGDLLECADDRADLAKYICENQDISISSKLEKCECKRPLLEKSHCIAEVENDEMPA 360
324 VHTCECHGDLLECADDRADLAKYICENQDISISSKLEKCECKRPLLEKSHCIAEVENDEMPA 383
361 DLPSLAADPVESKDVCKNVAEAKDVFGLGMLFYEARRRHPDYSVLLLRLLAKTYETTLK 420
384 DLPSLAADPVESKDVCKNVAEAKDVFGLGMLFYEARRRHPDYSVLLLRLLAKTYETTLK 443
421 CAADPHECYAKVDFEFLKYLVEIARRHPYFAPBELLFPAKRYKAAFTCCOAAADKAACLTP 480
444 CAADPHECYAKVDFEFLKYLVEIARRHPYFAPBELLFPAKRYKAAFTCCOAAADKAACLTP 503
481 PTLVEVSRLNIGKVSCKCKHPBEAKRMPCAEDYLSVNLQCVLHEKTPVSDRVTKCTES 540
504 PTLVEVSRLNIGKVSCKCKHPBEAKRMPCAEDYLSVNLQCVLHEKTPVSDRVTKCTES 563
541 LVNRRPCFSALAEVDETVVPKFNAPETFPHADICTLSKERQIKKQTAALVELVGRKPKAT 600
564 LVNRRPCFSALAEVDETVVPKFNAPETFPHADICTLSKERQIKKQTAALVELVGRKPKAT 623
601 KEQLKAVMDPFAAFVKEKCCAKADDKETCFABEGSKLVAAASQAALGL 645
624 KEQLKAVMDPFAAFVKEKCCAKADDKETCFABEGSKLVAAASQAALGL 668

RESULT 8

Sequence 1621, Application US/10775204
Publication No. US2005018664A1
GENERAL INFORMATION:

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? APPLICANT: Rosen, Craig A.
? APPLICANT: Haseltine, William A.
? APPLICANT: Haseltine, David J.
? APPLICANT: Turner, Andrew J.
? TITLE OF INVENTION: Albumin Fusion Proteins
? FILE REFERENCE: PF564
? CURRENT APPLICATION NUMBER: US/10/775,204
? PRIOR APPLICATION NUMBER: 2004-02-11
? PRIOR FILING DATE: 2001-12-21
? PRIOR APPLICATION NUMBER: 60/341,811
? PRIOR FILING DATE: 2002-07-24
? PRIOR APPLICATION NUMBER: 60/360,000
? PRIOR FILING DATE: 2002-02-28
? PRIOR APPLICATION NUMBER: 60/378,950
? PRIOR FILING DATE: 2002-05-10
? PRIOR APPLICATION NUMBER: 60/398,008
? PRIOR FILING DATE: 2002-07-24
? PRIOR APPLICATION NUMBER: 60/411,355
? PRIOR FILING DATE: 2002-09-18
? PRIOR APPLICATION NUMBER: 60/414,984
? PRIOR FILING DATE: 2002-10-02
? PRIOR APPLICATION NUMBER: 60/417,611
? PRIOR FILING DATE: 2002-10-11
? PRIOR APPLICATION NUMBER: 60/420,246
? PRIOR FILING DATE: 2002-10-23
? PRIOR APPLICATION NUMBER: 60/423,623
? PRIOR FILING DATE: 2002-11-05
? PRIOR APPLICATION NUMBER: 60/351,360
? PRIOR FILING DATE: 2002-01-28
? Remaining Prior Application data removed - See File Wrapper or PALM.
? NUMBER OF SEQ ID NOS: 2222
? SOFTWARE: Patentln Ver. 2.0
? SEQ ID NO 1621
? LENGTH: 668
? TYPE: PRT
? ORGANISM: Homo sapiens
? US-10-775-204-1621

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Query Match 100.0%; Score 3417; DB 5; Length 668;
Best Local Similarity 100.0%; Pred. No. 3,6e-259;
Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 HEGGTFTSDVSSYLEGDAKEFLIAMLVKGRHGGTFTSDVSSYLEGDAKEFLIAMLVKGR 60
DB 24 HEGGTFTSDVSSYLEGDAKEFLIAMLVKGRHGGTFTSDVSSYLEGDAKEFLIAMLVKGR 83
QY 61 DAHSEVAHRFKDLSGENPFAVLVLAFAOYLQCCPFEDHVKLVNEVTEFAKTCVADESAAE 120
DB 84 DAHSEVAHRFKDLSGENPFAVLVLAFAOYLQCCPFEDHVKLVNEVTEFAKTCVADESAAE 143
QY 121 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKOEPBRNECFLOHKDNDNPLRLVPRPV 180
DB 144 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKOEPBRNECFLOHKDNDNPLRLVPRPV 203
QY 181 DVNCTAFHNDSEFTFLKKYLYEIRARRPYYFAPBLLFFPAKRYKAAFTCCOAAADKAACLLP 240
DB 204 DVNCTAFHNDSEFTFLKKYLYEIRARRPYYFAPBLLFFPAKRYKAAFTCCOAAADKAACLLP 263
QY 241 KLDELRLRBEGRKASSAKOYLKCAISLQKFGERRAKAAVAARLSQRFPKAEFAEVSKLVDLTK 300
DB 264 KLDELRLRBEGRKASSAKOYLKCAISLQKFGERRAKAAVAARLSQRFPKAEFAEVSKLVDLTK 323
QY 301 VHTSCCHGDLLECCADBRADLAKYICENODSISSKLKEKCECEKPLLEKSHCIABVENDEMPA 360
DB 324 VHTSCCHGDLLECCADBRADLAKYICENODSISSKLKEKCECEKPLLEKSHCIABVENDEMPA 383
QY 361 DLPSLAADPVESKQVCKNVAEAKDVFGLMPLVEYARRHPDYSSVLLLRLLAKAYETTLK 420
DB 384 DLPSLAADPVESKQVCKNVAEAKDVFGLMPLVEYARRHPDYSSVLLLRLLAKAYETTLK 443
QY 421 CAADPHECYAKVDEKRPVVEEPONLIKONCELFEOLGKPKKPNALLVYTKKVPQVST 480
DB 444 CAADPHECYAKVDEKRPVVEEPONLIKONCELFEOLGKPKKPNALLVYTKKVPQVST 503

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QY 481 PTLVEVSRNIGKVGSKCCCKHPKAKMPCADYLSVTLNOLCVLHEKTPVSDRYTKCCTSS 540
DB 504 PTLVEVSRNIGKVGSKCCCKHPKAKMPCADYLSVTLNOLCVLHEKTPVSDRYTKCCTSS 563
QY 541 LVNRRPCFSALVDEYVYVKEFNAEFTFHADICTLSEKERQIKKOTALVELVYKHPKAT 600
DB 564 LVNRRPCFSALVDEYVYVKEFNAEFTFHADICTLSEKERQIKKOTALVELVYKHPKAT 623
QY 601 KEQLKAVMDPFAAFVEKCKKADDKETCFABEGKRLVAASQAALGL 645
DB 624 KEQLKAVMDPFAAFVEKCKKADDKETCFABEGKRLVAASQAALGL 668

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RESULT 9
US-10-775-180-419
; Sequence 419, Application US/10775180
; Publication No. US20050054570A1
; GENERAL INFORMATION:
? APPLICANT: Rosen, Craig A.
? APPLICANT: Haseltine, William A.
? TITLE OF INVENTION: Albumin Fusion Proteins
? FILE REFERENCE: PF574
? CURRENT APPLICATION NUMBER: US/10/775,180
? PRIOR FILING DATE: 2004-02-11
? PRIOR APPLICATION NUMBER: PCT/US02/40892
? PRIOR FILING DATE: 2002-12-23
? PRIOR APPLICATION NUMBER: 60/341,811
? PRIOR FILING DATE: 2001-12-21
? PRIOR APPLICATION NUMBER: 60/360,000
? PRIOR FILING DATE: 2002-02-28
? PRIOR APPLICATION NUMBER: 60/378,950
? PRIOR FILING DATE: 2002-05-10
? PRIOR APPLICATION NUMBER: 60/398,008
? PRIOR FILING DATE: 2002-07-24
? PRIOR APPLICATION NUMBER: 60/411,355
? PRIOR FILING DATE: 2002-09-18
? PRIOR APPLICATION NUMBER: 60/414,984
? PRIOR FILING DATE: 2002-10-02
? PRIOR APPLICATION NUMBER: 60/417,611
? PRIOR FILING DATE: 2002-10-11
? PRIOR APPLICATION NUMBER: 60/420,246
? PRIOR FILING DATE: 2002-10-23
? PRIOR APPLICATION NUMBER: 60/423,623
? Remaining Prior Application data removed - See File Wrapper or PALM.
? NUMBER OF SEQ ID NOS: 858
? SOFTWARE: Patentln Ver. 2.0
? SEQ ID NO 419
? LENGTH: 669
? TYPE: PRT
? ORGANISM: Homo sapiens
? US-10-775-180-419

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Query Match 100.0%; Score 3417; DB 5; Length 669;
Best Local Similarity 100.0%; Pred. No. 3,6e-259;
Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 HEGGTFTSDVSSYLEGDAKEFLIAMLVKGRHGGTFTSDVSSYLEGDAKEFLIAMLVKGR 60
DB 25 HEGGTFTSDVSSYLEGDAKEFLIAMLVKGRHGGTFTSDVSSYLEGDAKEFLIAMLVKGR 84
QY 61 DAHSEVAHRFKDLSGENPFAVLVLAFAOYLQCCPFEDHVKLVNEVTEFAKTCVADESAAE 120
DB 85 DAHSEVAHRFKDLSGENPFAVLVLAFAOYLQCCPFEDHVKLVNEVTEFAKTCVADESAAE 144
QY 121 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKOEPBRNECFLOHKDNDNPLRLVPRPV 180
DB 145 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKOEPBRNECFLOHKDNDNPLRLVPRPV 204
QY 181 DVNCTAFHNDSEFTFLKKYLYEIRARRPYYFAPBLLFFPAKRYKAAFTCCOAAADKAACLLP 240
DB 205 DVNCTAFHNDSEFTFLKKYLYEIRARRPYYFAPBLLFFPAKRYKAAFTCCOAAADKAACLLP 264

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Qy 241 KLDELREDEGKASSAKORLKCASLQKFGERRAFKMAVAVARLSQRPFKAEFAEVSQKLVTDLTK 300
Db 265 KLDELREDEGKASSAKORLKCASLQKFGERRAFKMAVAVARLSQRPFKAEFAEVSQKLVTDLTK 324
Qy 301 VHTRECGHDLLECGADDRADLAKYICENODSISSKLKECCCKPILKESHCTAEVNDMPA 360
Db 325 VHTRECGHDLLECGADDRADLAKYICENODSISSKLKECCCKPILKESHCTAEVNDMPA 384
Qy 361 DLPSLADPFVSKDVCNVAEAKDVFGLMFLYEVARRHPDYSVLLLRLLAKTYETLEKC 420
Db 385 DLPSLADPFVSKDVCNVAEAKDVFGLMFLYEVARRHPDYSVLLLRLLAKTYETLEKC 444
Qy 421 CAAADPHCYAKVDFEKPILVEEPONLIKONCELFEGQGEYKFNALLVRYTKKVPQVST 480
Db 445 CAAADPHCYAKVDFEKPILVEEPONLIKONCELFEGQGEYKFNALLVRYTKKVPQVST 504
Qy 481 PTLVEVSRLNGKVGSKCKKPEBAKRMPCADBYLSVNLQICVTHEKTPVSDRYTKCCTES 540
Db 505 PTLVEVSRLNGKVGSKCKKPEBAKRMPCADBYLSVNLQICVTHEKTPVSDRYTKCCTES 564
Qy 541 LVNRRPCEFSALVEDETYVPEKFNAPETTFHADICTLSEKERQIKKOTALVELVYKHKPKAT 600
Db 565 LVNRRPCEFSALVEDETYVPEKFNAPETTFHADICTLSEKERQIKKOTALVELVYKHKPKAT 624
Qy 601 KEOLKAVMDPFAAFVBEKCKKADDKETCFABEGKKLVAAASQAALGL 645
Db 625 KEOLKAVMDPFAAFVBEKCKKADDKETCFABEGKKLVAAASQAALGL 669

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RESULT 10
; Sequence 1231, Application US/10775204
; Publication No. US200501866441
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; APPLICANT: Balance, David J.
; APPLICANT: Turner, Andrew J.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: P564
; CURRENT FILING DATE: 2004-02-11
; PRIOR APPLICATION NUMBER: US/10/775, 204
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360, 000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378, 950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398, 008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411, 355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414, 984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417, 611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420, 246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423, 623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351, 360
; PRIOR FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PAMM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1231
; LENGTH: 669
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-775-204-1231
Query Match 100.0%; Score 3417; DB 5; Length 669;
Best Local Similarity 100.0%; Pred. No. 3.6e-259;

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Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 HEGGTFTSDVSSYLBEOAAKEFTAMLVKGRHGEGTFTSDVSSYLBEOAAKEFTAMLVKGR 60
Db 25 HEGGTFTSDVSSYLBEOAAKEFTAMLVKGRHGEGTFTSDVSSYLBEOAAKEFTAMLVKGR 84
Qy 61 DAKSEVAHRFKDLGSENFALVLIAPAOYLQCCPEPDHYKLVNBYTEFAKTCVADBSAR 120
Db 85 DAKSEVAHRFKDLGSENFALVLIAPAOYLQCCPEPDHYKLVNBYTEFAKTCVADBSAR 144
Qy 121 NCRKSLHTLFGDKLCTVAATRETFTYGMADCCAOEERNECELOHNDNDNPLRLVLRPEV 180
Db 145 NCRKSLHTLFGDKLCTVAATRETFTYGMADCCAOEERNECELOHNDNDNPLRLVLRPEV 204
Qy 181 DVNCTAFHDNEETFLKKYLYEIRRRHPYFAPAPILLFPARKYKAAPTECCOAAADKAACLLP 240
Db 205 DVNCTAFHDNEETFLKKYLYEIRRRHPYFAPAPILLFPARKYKAAPTECCOAAADKAACLLP 264
Qy 241 KLDELREDEGKASSAKORLKCASLQKFGERRAFKMAVAVARLSQRPFKAEFAEVSQKLVTDLTK 300
Db 265 KLDELREDEGKASSAKORLKCASLQKFGERRAFKMAVAVARLSQRPFKAEFAEVSQKLVTDLTK 324
Qy 301 VHTRECGHDLLECGADDRADLAKYICENODSISSKLKECCCKPILKESHCTAEVNDMPA 360
Db 325 VHTRECGHDLLECGADDRADLAKYICENODSISSKLKECCCKPILKESHCTAEVNDMPA 384
Qy 361 DLPSLADPFVSKDVCNVAEAKDVFGLMFLYEVARRHPDYSVLLLRLLAKTYETLEKC 420
Db 385 DLPSLADPFVSKDVCNVAEAKDVFGLMFLYEVARRHPDYSVLLLRLLAKTYETLEKC 444
Qy 421 CAAADPHCYAKVDFEKPILVEEPONLIKONCELFEGQGEYKFNALLVRYTKKVPQVST 480
Db 445 CAAADPHCYAKVDFEKPILVEEPONLIKONCELFEGQGEYKFNALLVRYTKKVPQVST 504
Qy 481 PTLVEVSRLNGKVGSKCKKPEBAKRMPCADBYLSVNLQICVTHEKTPVSDRYTKCCTES 540
Db 505 PTLVEVSRLNGKVGSKCKKPEBAKRMPCADBYLSVNLQICVTHEKTPVSDRYTKCCTES 564
Qy 541 LVNRRPCEFSALVEDETYVPEKFNAPETTFHADICTLSEKERQIKKOTALVELVYKHKPKAT 600
Db 565 LVNRRPCEFSALVEDETYVPEKFNAPETTFHADICTLSEKERQIKKOTALVELVYKHKPKAT 624
Qy 601 KEOLKAVMDPFAAFVBEKCKKADDKETCFABEGKKLVAAASQAALGL 645
Db 625 KEOLKAVMDPFAAFVBEKCKKADDKETCFABEGKKLVAAASQAALGL 669

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RESULT 11
; Sequence 447, Application US/10775180
; Publication No. US20050054570A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: P574
; CURRENT FILING DATE: 2004-02-11
; PRIOR APPLICATION NUMBER: US/10/775, 180
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: PCT/US02/40892
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/341, 811
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/360, 000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378, 950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398, 008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411, 355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414, 984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417, 611

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; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; Remaining Prior Application data removed - See File Wrapper or PAM.
; NUMBER OF SEQ ID NOS: 858
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 447
; LENGTH: 674
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-775-180-447

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Query Match      100.0%; Score 3417; DB 5; Length 674;
Best Local Similarity 100.0%; Pred. No. 3.7e-259;
Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 61 DAHKSVAHRFKDLGSENFALVLIAPAOYLQCCPEPDHVKLVNEVTEFAKTCVADESAB 120
DB 90 DAHKSVAHRFKDLGSENFALVLIAPAOYLQCCPEPDHVKLVNEVTEFAKTCVADESAB 149
QY 121 NCDKSLHTLFGDLCCTVAATLRETYGEMADCCAKOBERNECFLOHKDNDPRLVLRPEV 180
DB 150 NCDKSLHTLFGDLCCTVAATLRETYGEMADCCAKOBERNECFLOHKDNDPRLVLRPEV 209
QY 181 DVNCTAFHNDNEETFLKKYLYEIRRHRYFAPRLLFPKRYKAAFTGCCQAADKAACTLP 240
DB 210 DVNCTAFHNDNEETFLKKYLYEIRRHRYFAPRLLFPKRYKAAFTGCCQAADKAACTLP 269
QY 241 KDLDELDEGKASSAKORLKCASLQKFGERAFAKMAVAVARLSORPPKAEFAVSKLVTDLTK 300
DB 270 KDLDELDEGKASSAKORLKCASLQKFGERAFAKMAVAVARLSORPPKAEFAVSKLVTDLTK 329
QY 301 VHTRECGDILLECADDRADLAKYICENODSISSEKLECCCEKPLLEKSHCIAEYENDMPA 360
DB 330 VHTRECGDILLECADDRADLAKYICENODSISSEKLECCCEKPLLEKSHCIAEYENDMPA 389
QY 361 DLPSLAADFYESKDVCKNVAEAKDVLGMFLYEVARRHDPYSVLLLRLLAKYETLLEKC 420
DB 390 DLPSLAADFYESKDVCKNVAEAKDVLGMFLYEVARRHDPYSVLLLRLLAKYETLLEKC 449
QY 421 CAAADPHECYAKVFDEKPLVYEBPQNLIKONCELFEOLEGERKQNALLVYTKKVPQVST 509
DB 450 CAAADPHECYAKVFDEKPLVYEBPQNLIKONCELFEOLEGERKQNALLVYTKKVPQVST 540
QY 481 PTLVEVSRLGKVGSKCKGHPKAPKAMPKADYLSVVLNOLCVLHEKTPVSDRVTKCTTES 540
DB 510 PTLVEVSRLGKVGSKCKGHPKAPKAMPKADYLSVVLNOLCVLHEKTPVSDRVTKCTTES 569
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DB 570 LVNRRPCFSALVEDETYVPEKFNAEFTFHADICTLSEKROIKKQALVELVGHKPKAT 629
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DB 630 KEQLKAVMDPAPAVKVEKCKKADKDEKTCFAPABRGKLVVAASQALGL 674

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; FILE REFERENCE: PF564
; CURRENT APPLICATION NUMBER: US/10/775,204
; CURRENT FILING DATE: 2004-02-11
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; Remaining Prior Application data removed - See File Wrapper or PAM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1280
; LENGTH: 674
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-775-204-1280

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Query Match      100.0%; Score 3417; DB 5; Length 674;
Best Local Similarity 100.0%; Pred. No. 3.7e-259;
Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 HGEGETSDVSVSYLGEQAQKEFLAWLVKGRHGGTSDVSVSYLGEQAQKEFLAWLVKGR 60
DB 30 HGGGTFTSDVSVSYLGEQAQKEFLAWLVKGRHGGTFTSDVSVSYLGEQAQKEFLAWLVKGR 89
QY 61 DAHKSVAHRFKDLGSENFALVLIAPAOYLQCCPEPDHVKLVNEVTEFAKTCVADESAB 120
DB 90 DAHKSVAHRFKDLGSENFALVLIAPAOYLQCCPEPDHVKLVNEVTEFAKTCVADESAB 149
QY 121 NCDKSLHTLFGDLCCTVAATLRETYGEMADCCAKOBERNECFLOHKDNDPRLVLRPEV 180
DB 150 NCDKSLHTLFGDLCCTVAATLRETYGEMADCCAKOBERNECFLOHKDNDPRLVLRPEV 209
QY 181 DVNCTAFHNDNEETFLKKYLYEIRRHRYFAPRLLFPKRYKAAFTGCCQAADKAACTLP 240
DB 210 DVNCTAFHNDNEETFLKKYLYEIRRHRYFAPRLLFPKRYKAAFTGCCQAADKAACTLP 269
QY 241 KDLDELDEGKASSAKORLKCASLQKFGERAFAKMAVAVARLSORPPKAEFAVSKLVTDLTK 300
DB 270 KDLDELDEGKASSAKORLKCASLQKFGERAFAKMAVAVARLSORPPKAEFAVSKLVTDLTK 329
QY 301 VHTRECGDILLECADDRADLAKYICENODSISSEKLECCCEKPLLEKSHCIAEYENDMPA 360
DB 330 VHTRECGDILLECADDRADLAKYICENODSISSEKLECCCEKPLLEKSHCIAEYENDMPA 389
QY 361 DLPSLAADFYESKDVCKNVAEAKDVLGMFLYEVARRHDPYSVLLLRLLAKYETLLEKC 420
DB 390 DLPSLAADFYESKDVCKNVAEAKDVLGMFLYEVARRHDPYSVLLLRLLAKYETLLEKC 449
QY 421 CAAADPHECYAKVFDEKPLVYEBPQNLIKONCELFEOLEGERKQNALLVYTKKVPQVST 480
DB 450 CAAADPHECYAKVFDEKPLVYEBPQNLIKONCELFEOLEGERKQNALLVYTKKVPQVST 509
QY 481 PTLVEVSRLGKVGSKCKGHPKAPKAMPKADYLSVVLNOLCVLHEKTPVSDRVTKCTTES 540
DB 510 PTLVEVSRLGKVGSKCKGHPKAPKAMPKADYLSVVLNOLCVLHEKTPVSDRVTKCTTES 569
QY 541 LVNRRPCFSALVEDETYVPEKFNAEFTFHADICTLSEKROIKKQALVELVGHKPKAT 600

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US-10-775-204-1280
; Sequence 1280, Application US/10775204
; Publication No. US2005018664A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Habelcine, William A.
; APPLICANT: Balance, David J.
; APPLICANT: Turner, Andrew J.
; TITLE OF INVENTION: Albumin Fusion Proteins

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Db 570 LVNRRPFSALVEDEYTVPEFNAETFTFHADICTLSEKERQIKKOTALVELVGHKPKAT 629
 Qy 601 KEQIKAVMDPFAAFVFKCCKADDKETCFABEGKKLVAAASQALGL 645
 Db 630 KEQIKAVMDPFAAFVFKCCKADDKETCFABEGKKLVAAASQALGL 674

RESULT 13

US-10-775-180-610
 ; Sequence 610, Application US/10775180
 ; Publication No. US2005054570A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Rosen, Craig A.
 ; APPLICANT: Haseltine, William A.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: P574
 ; CURRENT APPLICATION NUMBER: US/10/775,180
 ; CURRENT FILING DATE: 2004-02-11
 ; PRIORITY APPLICATION NUMBER: PCT/US02/40892
 ; PRIORITY FILING DATE: 2002-12-23
 ; PRIORITY FILING DATE: 2002-12-23
 ; PRIORITY FILING DATE: 2001-12-21
 ; PRIORITY FILING DATE: 2002-02-28
 ; PRIORITY FILING DATE: 2002-02-28
 ; PRIORITY FILING DATE: 2002-02-28
 ; PRIORITY FILING DATE: 2002-05-10
 ; PRIORITY FILING DATE: 2003/378,950
 ; PRIORITY FILING DATE: 2002-07-24
 ; PRIORITY FILING DATE: 2002-07-24
 ; PRIORITY FILING DATE: 2002-09-18
 ; PRIORITY FILING DATE: 2002-09-18
 ; PRIORITY FILING DATE: 2002-10-02
 ; PRIORITY FILING DATE: 2002-10-02
 ; PRIORITY FILING DATE: 2002-10-11
 ; PRIORITY FILING DATE: 2002-10-11
 ; PRIORITY FILING DATE: 2002-10-11
 ; PRIORITY FILING DATE: 2002-10-24
 ; PRIORITY FILING DATE: 2002-10-23
 ; PRIORITY FILING DATE: 2002-10-23
 ; PRIORITY FILING DATE: 2002-11-05
 ; Remaining Prior Application data removed - See file wrapper or PAM.
 ; NUMBER OF SEQ ID NOS: 858
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 610
 ; LENGTH: 730
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-10-775-180-610

Query Match 100.0%; Score 3417; DB 5; Length 730;
 Best Local Similarity 100.0%; Pred. No. 4,1e-259;
 Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HGGGFTSDVSSYLEGQAQKFIAMLVKGRHGGEGFTSDVSSYLEGQAQKFIAMLVKGR 60
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 Qy 61 DAHSEVAVHRRFDLGEENFKALVLAFAQYLQCCPEFDHVKLVNTEVFAKTCVADESAB 120
 Db 146 DAHSEVAVHRRFDLGEENFKALVLAFAQYLQCCPEFDHVKLVNTEVFAKTCVADESAB 205
 Qy 121 NDKSLSHTLFGDKLCTVATLRETTGEMADCCAKQEPERNECGLQKNDNPNLPRVREAV 180
 Db 206 NDKSLSHTLFGDKLCTVATLRETTGEMADCCAKQEPERNECGLQKNDNPNLPRVREAV 265
 Qy 181 DVMCTAFPHDNEETFLKYLVEYARRRHPPYVAPBELLFPARRYKAAFTTECCQAADKAACLLP 240
 Db 266 DVMCTAFPHDNEETFLKYLVEYARRRHPPYVAPBELLFPARRYKAAFTTECCQAADKAACLLP 325
 Qy 241 KLDELARDGKASASAKORLKCASLQKFGERAFAKAWAVARLSQRFPPAAEVAESKLVTDLTK 300
 Db 326 KLDELARDGKASASAKORLKCASLQKFGERAFAKAWAVARLSQRFPPAAEVAESKLVTDLTK 385
 Qy 301 VHTCCCHGDLLECADRADLAKYICENQDSSISKLECCERKLEKSHCIAEVENDEMPA 360

Db 386 VHTCCCHGDLLECADRADLAKYICENQDSSISKLECCERKLEKSHCIAEVENDEMPA 445
 Qy 361 DLPSLADPVSERKDYCKONVAAKADVFLGMLVEYARRRHPPYVAPBELLFPARRYKAAFTTECCQAADKAACLLP 420
 Db 446 DLPSLADPVSERKDYCKONVAAKADVFLGMLVEYARRRHPPYVAPBELLFPARRYKAAFTTECCQAADKAACLLP 505
 Qy 421 CAAADPHECYAKVDFEFPKLVBERPQNLIKQNCLEPQDLGEYKQNALVRYTKKVPQVST 480
 Db 506 CAAADPHECYAKVDFEFPKLVBERPQNLIKQNCLEPQDLGEYKQNALVRYTKKVPQVST 565
 Qy 481 PTLVEVSRNIGKTKGSKCKHPEAKRMPQADYLSVNLQCLVTHETKPPVSDRVTKCCSTBS 540
 Db 566 PTLVEVSRNIGKTKGSKCKHPEAKRMPQADYLSVNLQCLVTHETKPPVSDRVTKCCSTBS 625
 Qy 541 LVNRRPFSALVEDEYTVPEFNAETFTFHADICTLSEKERQIKKOTALVELVGHKPKAT 600
 Db 626 LVNRRPFSALVEDEYTVPEFNAETFTFHADICTLSEKERQIKKOTALVELVGHKPKAT 685
 Qy 601 KEQIKAVMDPFAAFVFKCCKADDKETCFABEGKKLVAAASQALGL 645
 Db 686 KEQIKAVMDPFAAFVFKCCKADDKETCFABEGKKLVAAASQALGL 730

RESULT 14

US-10-775-204-1622
 ; Sequence 1622, Application US/10775204
 ; Publication No. US20050186664A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Rosen, Craig A.
 ; APPLICANT: Haseltine, William A.
 ; APPLICANT: Balance, David J.
 ; APPLICANT: Turner, Andrew J.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: P564
 ; CURRENT APPLICATION NUMBER: US/10/775,204
 ; CURRENT FILING DATE: 2004-02-11
 ; PRIORITY APPLICATION NUMBER: 60/341,811
 ; PRIORITY FILING DATE: 2001-12-21
 ; PRIORITY FILING DATE: 2002-02-28
 ; PRIORITY FILING DATE: 2002-02-28
 ; PRIORITY FILING DATE: 2002-05-10
 ; PRIORITY FILING DATE: 2002-05-10
 ; PRIORITY FILING DATE: 2002-07-24
 ; PRIORITY FILING DATE: 2002-07-24
 ; PRIORITY FILING DATE: 2002-09-18
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 ; PRIORITY FILING DATE: 2002-10-02
 ; PRIORITY FILING DATE: 2002-10-02
 ; PRIORITY FILING DATE: 2002-10-11
 ; PRIORITY FILING DATE: 2002-10-11
 ; PRIORITY FILING DATE: 2002-10-23
 ; PRIORITY FILING DATE: 2002-10-23
 ; PRIORITY FILING DATE: 2002-11-05
 ; PRIORITY FILING DATE: 2002-11-05
 ; Remaining Prior Application data removed - See file wrapper or PAM.
 ; NUMBER OF SEQ ID NOS: 2222
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 1622
 ; LENGTH: 730
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-10-775-204-1622

Query Match 100.0%; Score 3417; DB 5; Length 730;
 Best Local Similarity 100.0%; Pred. No. 4,1e-259;
 Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HGGGFTSDVSSYLEGQAQKFIAMLVKGRHGGEGFTSDVSSYLEGQAQKFIAMLVKGR 60
 Db 86 HGGGFTSDVSSYLEGQAQKFIAMLVKGRHGGEGFTSDVSSYLEGQAQKFIAMLVKGR 145

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QY 61 DAHSEVAHRFKDLGEBENFKALVLIAPAOYLQCCPPEHDVYKLVNEVTEFAKTCVADESAAE 120
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QY 121 NCDKSIHTLFGDKLCTVAATLRETYGEMADCCAKQEBERNBCFLQHKDDNPNLPRLYRPEV 180
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QY 181 DVMCTAFHNDNETFLKKYLYEIRARRHPYFAPABELLFFPAKRYKAAFTPECQAAADKAAKCLLP 240
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DB 266 DVMCTAFHNDNETFLKKYLYEIRARRHPYFAPABELLFFPAKRYKAAFTPECQAAADKAAKCLLP 325
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QY 241 KDELDEDEGKASSAKORLKCASIQKFGERAFAKMAVAVARLSQRPPKAFPAVSKLVTDLTK 300
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DB 326 KDELDEDEGKASSAKORLKCASIQKFGERAFAKMAVAVARLSQRPPKAFPAVSKLVTDLTK 385
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QY 301 VHTTECGHDLLEBCADDRADLAKYICENQDISSSKLEKCECEKPLLEKSHCIAVENDEMPA 360
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DB 386 VHTTECGHDLLEBCADDRADLAKYICENQDISSSKLEKCECEKPLLEKSHCIAVENDEMPA 445
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QY 361 DLPSLAADPVESKDVCKNTVAEAKDVFLGMFLYEYARRHPDYSVVLLLRKAKTYETTLK 420
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DB 446 DLPSLAADPVESKDVCKNTVAEAKDVFLGMFLYEYARRHPDYSVVLLLRKAKTYETTLK 505
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DB 506 CAAADPHECVAKYFDEKPLVEBPONLIKONCELFEBQLGEGYKFNALLVRYTKKVPQVST 565
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DB 566 PTLVEVSRNLGKYGSKCKKHPKAMPKADYLSVTLNQLCVLHEKTPVSDRYTKCCTES 625
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QY 541 LVNRRPCFSALBEVDFTYVPKRFNAETFTFHADICTLSEKERQIKKOTALVELVYKHKPKAT 600
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DB 626 LVNRRPCFSALBEVDFTYVPKRFNAETFTFHADICTLSEKERQIKKOTALVELVYKHKPKAT 685
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QY 601 KEQLKAVMDPFAAFVKEKCCAKADDKETCFABEGKQLVAASQAALGL 645
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DB 686 KEQLKAVMDPFAAFVKEKCCAKADDKETCFABEGKQLVAASQAALGL 730
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RESULT 15
US-10-775-180-614
; Sequence 614, Application US//10775180
; Publication No. US20050054570A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: P574
; CURRENT APPLICATION NUMBER: US//10/775, 180
; CURRENT FILING DATE: 2004-02-11
; PRIOR APPLICATION NUMBER: PCT/US02/40892
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341, 811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360, 000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378, 950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398, 008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411, 355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414, 984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417, 611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420, 246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423, 623
; PRIOR FILING DATE: 2002-11-05

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; Remaining Prior Application data removed - See file wrapper or PALM.
; NUMBER OF SEQ ID NOS: 858
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 614
; LENGTH: 662
; TYPE: PRF
; ORGANISM: Homo sapiens
US-10-775-180-614

Query Match          99.8%; Score 3411; DB 5; Length 662;
Best Local Similarity 99.8%; Pred. No. 1.1e-258;
Matches 644; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 HGEGETSDVSSYLBGOAAKEFTAWLVKGRHGEGETSDVSSYLBGOAAKEFTAWLVKGR 60
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DB 18 HGEGETSDVSSYLBGOAAKEFTAWLVKGRHGEGETSDVSSYLBGOAAKEFTAWLVKGR 77
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QY 61 DAHSEVAHRFKDLGEBENFKALVLIAPAOYLQCCPPEHDVYKLVNEVTEFAKTCVADESAAE 120
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DB 78 DAHSEVAHRFKDLGEBENFKALVLIAPAOYLQCCPPEHDVYKLVNEVTEFAKTCVADESAAE 137
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DB 258 KDELDEDEGKASSAKORLKCASIQKFGERAFAKMAVAVARLSQRPPKAFPAVSKLVTDLTK 317
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DB 318 VHTTECGHDLLEBCADDRADLAKYICENQDISSSKLEKCECEKPLLEKSHCIAVENDEMPA 377
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QY 361 DLPSLAADPVESKDVCKNTVAEAKDVFLGMFLYEYARRHPDYSVVLLLRKAKTYETTLK 420
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|
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DB 378 DLPSLAADPVESKDVCKNTVAEAKDVFLGMFLYEYARRHPDYSVVLLLRKAKTYETTLK 437
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QY 421 CAAADPHECVAKYFDEKPLVEBPONLIKONCELFEBQLGEGYKFNALLVRYTKKVPQVST 480
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DB 438 CAAADPHECVAKYFDEKPLVEBPONLIKONCELFEBQLGEGYKFNALLVRYTKKVPQVST 497
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QY 481 PTLVEVSRNLGKYGSKCKKHPKAMPKADYLSVTLNQLCVLHEKTPVSDRYTKCCTES 540
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|
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DB 498 PTLVEVSRNLGKYGSKCKKHPKAMPKADYLSVTLNQLCVLHEKTPVSDRYTKCCTES 557
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QY 541 LVNRRPCFSALBEVDFTYVPKRFNAETFTFHADICTLSEKERQIKKOTALVELVYKHKPKAT 600
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DB 558 LVNRRPCFSALBEVDFTYVPKRFNAETFTFHADICTLSEKERQIKKOTALVELVYKHKPKAT 617
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QY 601 KEQLKAVMDPFAAFVKEKCCAKADDKETCFABEGKQLVAASQAALGL 645
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DB 618 KEQLKAVMDPFAAFVKEKCCAKADDKETCFABEGKQLVAASQAALGL 662
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Job time : 138.055 secs

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GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 19, 2006, 12:31:03 ; Search time 21.5305 Seconds
(without alignments)
1318.215 Million cell updates/sec

Title: US-10-775-180-447_COPY_30_674

Perfect score: 3417
1.HBGRFTSDVSSYLEGQAAR.....TCPAREGKLVVAASQAALGR 645

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 225428 seqs, 44002918 residues

Total number of hits satisfying chosen parameters: 225428

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Published Applications_AA_New:*
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2: /SIDS5/ptodata/1/pubppaa/US06_NEW_PUB pep:*
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8: /SIDS5/ptodata/1/pubppaa/US66_NEW_PUB pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	3417	100.0	674	US-11-175-690-206	Sequence 206, App
2	3417	100.0	915	US-11-175-690-208	Sequence 208, App
3	3254	95.2	646	US-11-175-690-223	Sequence 223, App
4	3253	95.2	647	US-11-175-690-212	Sequence 212, App
5	3253	95.2	648	US-11-175-690-214	Sequence 214, App
6	3252	95.2	649	US-11-175-690-213	Sequence 213, App
7	3252	95.2	650	US-11-175-690-209	Sequence 209, App
8	3251	95.2	651	US-11-175-690-224	Sequence 224, App
9	3251	95.1	652	US-11-175-690-218	Sequence 218, App
10	3250	95.1	653	US-11-175-690-219	Sequence 219, App
11	3250	95.1	654	US-11-175-690-210	Sequence 210, App
12	3250	95.1	655	US-11-175-690-220	Sequence 220, App
13	3249	95.1	656	US-11-175-690-225	Sequence 225, App
14	3249	95.1	657	US-11-175-690-216	Sequence 216, App
15	3248	95.1	657	US-11-175-690-303	Sequence 303, App
16	3247	95.0	659	US-11-175-690-221	Sequence 221, App
17	3247	95.0	646	US-11-175-690-276	Sequence 276, App
18	3183	93.2	678	US-11-175-690-238	Sequence 238, App
19	3183	93.2	642	US-11-175-690-233	Sequence 233, App
20	3173	92.9	642	US-11-175-690-242	Sequence 242, App
21	3167	92.7	647	US-11-175-690-242	Sequence 242, App
22	3154	92.3	636	US-11-175-690-268	Sequence 268, App
23	3151	92.2	636	US-11-175-690-278	Sequence 278, App
24	3150	92.2	636	US-11-175-690-240	Sequence 240, App
25	3146	92.1	636	US-11-175-690-240	Sequence 240, App

Result	Seq	App	Seq	App	Seq	App	Seq	App
26	3135	91.7	688	7	US-11-175-690-198	Sequence 198, App		
27	3135	91.7	693	7	US-11-175-690-199	Sequence 199, App		
28	3131	91.6	629	7	US-11-175-690-562	Sequence 562, App		
29	3127	91.5	637	7	US-11-175-690-266	Sequence 266, App		
30	3125	91.5	672	7	US-11-175-690-200	Sequence 200, App		
31	3118	91.2	728	7	US-11-175-690-244	Sequence 244, App		
32	3118	91.2	728	7	US-11-175-690-246	Sequence 246, App		
33	3118	91.2	728	7	US-11-175-690-248	Sequence 248, App		
34	3112	91.1	634	7	US-11-175-690-207	Sequence 207, App		
35	3109	91.0	638	7	US-11-175-690-229	Sequence 229, App		
36	3108	91.0	742	7	US-11-175-690-525	Sequence 525, App		
37	3108	91.0	629	7	US-11-175-690-3	Sequence 3, App1		
38	3108	91.0	609	7	US-11-175-690-561	Sequence 561, App		
39	3108	91.0	634	7	US-11-175-690-279	Sequence 279, App		
40	3108	91.0	636	7	US-11-175-690-239	Sequence 239, App		
41	3108	91.0	636	7	US-11-175-690-267	Sequence 267, App		
42	3108	91.0	636	7	US-11-175-690-277	Sequence 277, App		
43	3108	91.0	637	7	US-11-175-690-265	Sequence 265, App		
44	3108	91.0	637	7	US-11-175-690-557	Sequence 557, App		
45	3108	91.0	638	7	US-11-175-690-559	Sequence 559, App		

ALIGNMENTS

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RESULT 1
US-11-175-690-206
? Sequence 206, Application US/11175690
? Publication No. US20060014254A1
? GENERAL INFORMATION:
? APPLICANT: Haselcline et al.
? TITLE OR INVENTION: Albumin Fusion Proteins
? FILE REFERENCE: PR605
? CURRENT APPLICATION NUMBER: US/11/175, 690
? PRIOR FILING DATE: 2005-07-07
? PRIOR APPLICATION NUMBER: PCT/US04/001369
? PRIOR FILING DATE: 2004-01-20
? PRIOR APPLICATION NUMBER: US 60/441,305
? PRIOR FILING DATE: 2003-01-22
? PRIOR APPLICATION NUMBER: US 60/453,201
? PRIOR FILING DATE: 2003-03-11
? PRIOR APPLICATION NUMBER: US 60/467,222
? PRIOR FILING DATE: 2003-05-02
? PRIOR APPLICATION NUMBER: US 60/472,816
? PRIOR FILING DATE: 2003-05-23
? PRIOR APPLICATION NUMBER: US 60/476,267
? PRIOR FILING DATE: 2003-06-06
? PRIOR APPLICATION NUMBER: US 60/505,172
? PRIOR FILING DATE: 2003-09-24
? PRIOR APPLICATION NUMBER: US 60/506,746
? PRIOR FILING DATE: 2003-09-30
? NUMBER OF SEQ ID NOS: 568
? SOFTWARE: Patentln Ver. 2.0
? SEQ ID NO 206
? LENGTH: 674
? TYPE: PRT
? ORGANISM: Homo sapiens
US-11-175-690-206
Query Match 100.0%; Score 3417; DB 7; Length 674;
Best Local Similarity 100.0%; Pred. No. 6,8e-262;
Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 HBGRFTSDVSSYLEGQAARFAMLVKGRHGRTFTSDVSSYLEGQAARFAMLVKGR 60
DB 30 HBGRFTSDVSSYLEGQAARFAMLVKGRHGRTFTSDVSSYLEGQAARFAMLVKGR 89
QY 61 DAHSEVAHRFKDIGNENFALVLIAPAOYLQCCPFEDHYKLVNEVTEFAKTCVADESSAE 120
DB 90 DAHSEVAHRFKDIGNENFALVLIAPAOYLQCCPFEDHYKLVNEVTEFAKTCVADESSAE 149
QY 121 NCDKSHLTLFGDKLCTVATLRETYGEMADCCAKQEPERNECFI QHKDNDNPLPRLVPEV 180

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Db 150 NCDKSIHTLFGDKLCTVAATLRETYGEMADCCAKQEBERNECFLOHKDNDPNLRLVLRPEV 209
Qy 181 DWMCSTAFHNDSEFTFLKKYLYEYIARRRHPYFYAPPELLFPAKRYKAAFTTECCOAAADKACLLP 240
Db 210 DWMCSTAFHNDSEFTFLKKYLYEYIARRRHPYFYAPPELLFPAKRYKAAFTTECCOAAADKACLLP 269
Qy 241 KDELRLDEBGKASSAKORLKCASIQKFGERRAFKMAVAARLSQRPFKAEPAEVSRLVTDLTK 300
Db 270 KDELRLDEBGKASSAKORLKCASIQKFGERRAFKMAVAARLSQRPFKAEPAEVSRLVTDLTK 329
Qy 301 VHTTECGHDLLEBCADDRADLAKYICENODSISSEKLAECCEKPLLEKSHCIAEVENDEMPA 360
Db 330 VHTTECGHDLLEBCADDRADLAKYICENODSISSEKLAECCEKPLLEKSHCIAEVENDEMPA 389
Qy 361 DLPSLAADPFVESKDVCKNVAEADVFLGMFLYFYARRHPYSVLLRLAKYETTLK 420
Db 390 DLPSLAADPFVESKDVCKNVAEADVFLGMFLYFYARRHPYSVLLRLAKYETTLK 449
Qy 421 CAAADPHCEYAKYFDEEKPRLVEBPONLIKONCELFEGOLGEYKFNQALLVRYTKVPOVST 480
Db 450 CAAADPHCEYAKYFDEEKPRLVEBPONLIKONCELFEGOLGEYKFNQALLVRYTKVPOVST 509
Qy 481 PTLVEVSRNLGKGVSKCKHPEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCTTES 540
Db 510 PTLVEVSRNLGKGVSKCKHPEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCTTES 569
Qy 541 LVNRRPCFSALVEDEYVPRKFNAAETFTFHADICTLSEKROIKKQTAALVELVHKPKAT 600
Db 570 LVNRRPCFSALVEDEYVPRKFNAAETFTFHADICTLSEKROIKKQTAALVELVHKPKAT 629
Qy 601 KEOJKAVMDDPFAAFVEKCKKADDKETCFABEGKKLVAAASQAALGL 645
Db 630 KEOJKAVMDDPFAAFVEKCKKADDKETCFABEGKKLVAAASQAALGL 674

```

RESULT 2

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; Sequence 208, Application US/11175690
; Publication No. US20060014254A1
; GENERAL INFORMATION:
; APPLICANT: Haselcline et al.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PP605
; CURRENT APPLICATION NUMBER: US/11/175,690
; CURRENT FILING DATE: 2005-07-07
; PRIOR APPLICATION NUMBER: PCT/US04/001369
; PRIOR FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: US 60/441,305
; PRIOR FILING DATE: 2003-01-22
; PRIOR APPLICATION NUMBER: US 60/453,201
; PRIOR FILING DATE: 2003-03-11
; PRIOR APPLICATION NUMBER: US 60/467,222
; PRIOR FILING DATE: 2003-05-02
; PRIOR APPLICATION NUMBER: US 60/472,816
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 60/476,267
; PRIOR FILING DATE: 2003-06-06
; PRIOR APPLICATION NUMBER: US 60/505,172
; PRIOR FILING DATE: 2003-09-24
; PRIOR APPLICATION NUMBER: US 60/506,746
; PRIOR FILING DATE: 2003-09-30
; NUMBER OF SEQ ID NOS: 568
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 208
; LENGTH: 915
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-11-175-690-208

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```

Query Match 100.0%; Score 3417; DB 7; Length 915;
Best Local Similarity 100.0%; Pred. No. 1e-261;
Matches 645; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 HGEQITTSVSVSYLBEQAAKEPFAVLVGRHGEFTSPVSSYLBEOAAKEPFAVLVGR 60
Db 30 HGEQITTSVSVSYLBEQAAKEPFAVLVGRHGEFTSPVSSYLBEOAAKEPFAVLVGR 89
Qy 61 DAHSEVAHRFKDLGSENFKALVLLPAQYLQCCPEDEHVKLVNEVTEFAKTCVADSESAE 120
Db 90 DAHSEVAHRFKDLGSENFKALVLLPAQYLQCCPEDEHVKLVNEVTEFAKTCVADSESAE 149
Qy 121 NCDKSIHTLFGDKLCTVAATLRETYGEMADCCAKQEBERNECFLOHKDNDPNLRLVLRPEV 180
Db 150 NCDKSIHTLFGDKLCTVAATLRETYGEMADCCAKQEBERNECFLOHKDNDPNLRLVLRPEV 209
Qy 181 DWMCSTAFHNDSEFTFLKKYLYEYIARRRHPYFYAPPELLFPAKRYKAAFTTECCOAAADKACLLP 240
Db 210 DWMCSTAFHNDSEFTFLKKYLYEYIARRRHPYFYAPPELLFPAKRYKAAFTTECCOAAADKACLLP 269
Qy 241 KDELRLDEBGKASSAKORLKCASIQKFGERRAFKMAVAARLSQRPFKAEPAEVSRLVTDLTK 300
Db 270 KDELRLDEBGKASSAKORLKCASIQKFGERRAFKMAVAARLSQRPFKAEPAEVSRLVTDLTK 329
Qy 301 VHTTECGHDLLEBCADDRADLAKYICENODSISSEKLAECCEKPLLEKSHCIAEVENDEMPA 360
Db 330 VHTTECGHDLLEBCADDRADLAKYICENODSISSEKLAECCEKPLLEKSHCIAEVENDEMPA 389
Qy 361 DLPSLAADPFVESKDVCKNVAEADVFLGMFLYFYARRHPYSVLLRLAKYETTLK 420
Db 390 DLPSLAADPFVESKDVCKNVAEADVFLGMFLYFYARRHPYSVLLRLAKYETTLK 449
Qy 421 CAAADPHCEYAKYFDEEKPRLVEBPONLIKONCELFEGOLGEYKFNQALLVRYTKVPOVST 480
Db 450 CAAADPHCEYAKYFDEEKPRLVEBPONLIKONCELFEGOLGEYKFNQALLVRYTKVPOVST 509
Qy 481 PTLVEVSRNLGKGVSKCKHPEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCTTES 540
Db 510 PTLVEVSRNLGKGVSKCKHPEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCTTES 569
Qy 541 LVNRRPCFSALVEDEYVPRKFNAAETFTFHADICTLSEKROIKKQTAALVELVHKPKAT 600
Db 570 LVNRRPCFSALVEDEYVPRKFNAAETFTFHADICTLSEKROIKKQTAALVELVHKPKAT 629
Qy 601 KEOJKAVMDDPFAAFVEKCKKADDKETCFABEGKKLVAAASQAALGL 645
Db 630 KEOJKAVMDDPFAAFVEKCKKADDKETCFABEGKKLVAAASQAALGL 674

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RESULT 3

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; Sequence 223, Application US/11175690
; Publication No. US20060014254A1
; GENERAL INFORMATION:
; APPLICANT: Haselcline et al.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PP605
; CURRENT APPLICATION NUMBER: US/11/175,690
; CURRENT FILING DATE: 2005-07-07
; PRIOR APPLICATION NUMBER: PCT/US04/001369
; PRIOR FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: US 60/441,305
; PRIOR FILING DATE: 2003-01-22
; PRIOR APPLICATION NUMBER: US 60/453,201
; PRIOR FILING DATE: 2003-03-11
; PRIOR APPLICATION NUMBER: US 60/467,222
; PRIOR FILING DATE: 2003-05-02
; PRIOR APPLICATION NUMBER: US 60/472,816
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 60/476,267
; PRIOR FILING DATE: 2003-06-06
; PRIOR APPLICATION NUMBER: US 60/505,172
; PRIOR FILING DATE: 2003-09-24
; PRIOR APPLICATION NUMBER: US 60/506,746
; PRIOR FILING DATE: 2003-09-30
; NUMBER OF SEQ ID NOS: 568
; SOFTWARE: PatentIn Ver. 2.0

```

SEQ ID NO 223
LENGTH: 646
TYPE: PRT
ORGANISM: Homo sapiens
US-11-175-690-223

Query Match 95.2%: Score 3254; DB 7; Length 646;
Best Local Similarity 99.7%: Pred. No. 4.8e-249;
Matches 616; Conservative 0; Mismatches 0; Indels 2; Gaps 1;

30 RHGGFTSDVSSYLSBQAAKERFLAWLVKGR--DAHKSEVAHRFKDLGSENFKALVLI 87
29 RHGGFTSDVSSYLSBQAAKERFLAWLVKGRDADAHKSEVAHRFKDLGSENFKALVLI 88
88 AQYIQCCPPEDHVKLVNEVTEFAKTCVADESANCDKSLHTLFGDKLCTVATLRETYGE 147
89 AQYIQCCPPEDHVKLVNEVTEFAKTCVADESANCDKSLHTLFGDKLCTVATLRETYGE 148
148 ADCCAKQEBERNECFLOHNDPNLPRVLRPEVDVWCTAFHNEBETFLKYYIYELARRH 207
149 ADCCAKQEBERNECFLOHNDPNLPRVLRPEVDVWCTAFHNEBETFLKYYIYELARRH 208
208 YFYAPPELLFPAKRYKAAFTBCCQADKAAACLLPKLDELDRDGGKASSAKORLKCASLQKFG 267
209 YFYAPPELLFPAKRYKAAFTBCCQADKAAACLLPKLDELDRDGGKASSAKORLKCASLQKFG 268
268 ERAFKAWAVARLSQRFPKAEFAVSKLVTDITKVTHTCCGDDLLBGCADDRADLAKYICE 327
269 ERAFKAWAVARLSQRFPKAEFAVSKLVTDITKVTHTCCGDDLLBGCADDRADLAKYICE 328
328 ODSSISKLKCECEKPLERKSHCIAEVENDEMPADLPSTLAADPVESKDVCKNYAEARADVF 387
329 ODSSISKLKCECEKPLERKSHCIAEVENDEMPADLPSTLAADPVESKDVCKNYAEARADVF 388
388 GMFLYFYARRHDPYSVLLLRLLAKTYETTLKCCAAADPHECYAKVDFEKPFLVEBPONL 447
389 GMFLYFYARRHDPYSVLLLRLLAKTYETTLKCCAAADPHECYAKVDFEKPFLVEBPONL 448
448 IKONCELPEQLGSEYKQNALIVRYTKVQVSTPLVVEVSRNLGKVGSKCKKHPEAKRM 507
449 IKONCELPEQLGSEYKQNALIVRYTKVQVSTPLVVEVSRNLGKVGSKCKKHPEAKRM 508
508 CAEYLSVVLNQLCVLHKRTPVSDRVTKCTESLIVNRRPFCFSALBVDFTVVPKERNMETF 567
509 CAEYLSVVLNQLCVLHKRTPVSDRVTKCTESLIVNRRPFCFSALBVDFTVVPKERNMETF 568
568 TFHADICTLSEKERQIKKQTAALVELVHKHPKATYKQLKAWMDPFAAFVEKCCAKADDKETC 627
569 TFHADICTLSEKERQIKKQTAALVELVHKHPKATYKQLKAWMDPFAAFVEKCCAKADDKETC 628
628 FAEEGKKLVAAASQAALGL 645
629 FAEEGKKLVAAASQAALGL 646

PRIOR APPLICATION NUMBER: US 60/472,816
PRIOR FILING DATE: 2003-05-23
PRIOR APPLICATION NUMBER: US 60/476,267
PRIOR FILING DATE: 2003-06-06
PRIOR APPLICATION NUMBER: US 60/505,172
PRIOR FILING DATE: 2003-09-24
PRIOR APPLICATION NUMBER: US 60/506,746
PRIOR FILING DATE: 2003-09-30
NUMBER OF SEQ ID NOS: 568
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 212
LENGTH: 647
TYPE: PRT
ORGANISM: Homo sapiens
US-11-175-690-212
Query Match 95.2%: Score 3253.5; DB 7; Length 647;
Best Local Similarity 99.5%: Pred. No. 5.3e-249;
Matches 616; Conservative 0; Mismatches 0; Indels 3; Gaps 1;

30 RHGGFTSDVSSYLSBQAAKERFLAWLVKGR---DAHKSEVAHRFKDLGSENFKALVLI 86
29 RHGGFTSDVSSYLSBQAAKERFLAWLVKGRDADAHKSEVAHRFKDLGSENFKALVLI 88
87 FAQYIQCCPPEDHVKLVNEVTEFAKTCVADESANCDKSLHTLFGDKLCTVATLRETYGE 146
89 FAQYIQCCPPEDHVKLVNEVTEFAKTCVADESANCDKSLHTLFGDKLCTVATLRETYGE 148
147 MADCCAKQEBERNECFLOHNDPNLPRVLRPEVDVWCTAFHNEBETFLKYYIYELARRH 206
149 MADCCAKQEBERNECFLOHNDPNLPRVLRPEVDVWCTAFHNEBETFLKYYIYELARRH 208
207 PYFYAPPELLFPAKRYKAAFTBCCQADKAAACLLPKLDELDRDGGKASSAKORLKCASLQKFG 266
209 PYFYAPPELLFPAKRYKAAFTBCCQADKAAACLLPKLDELDRDGGKASSAKORLKCASLQKFG 268
267 GERAFKAWAVARLSQRFPKAEFAVSKLVTDITKVTHTCCGDDLLBGCADDRADLAKYICE 326
269 GERAFKAWAVARLSQRFPKAEFAVSKLVTDITKVTHTCCGDDLLBGCADDRADLAKYICE 328
327 NODSISKLKCECEKPLERKSHCIAEVENDEMPADLPSTLAADPVESKDVCKNYAEARADVF 386
329 NODSISKLKCECEKPLERKSHCIAEVENDEMPADLPSTLAADPVESKDVCKNYAEARADVF 388
387 LGMFLYFYARRHDPYSVLLLRLLAKTYETTLKCCAAADPHECYAKVDFEKPFLVEBPON 446
389 LGMFLYFYARRHDPYSVLLLRLLAKTYETTLKCCAAADPHECYAKVDFEKPFLVEBPON 448
447 IKONCELPEQLGSEYKQNALIVRYTKVQVSTPLVVEVSRNLGKVGSKCKKHPEAKRM 506
449 IKONCELPEQLGSEYKQNALIVRYTKVQVSTPLVVEVSRNLGKVGSKCKKHPEAKRM 508
507 PCAEDYLSVVLNQLCVLHKRTPVSDRVTKCTESLIVNRRPFCFSALBVDFTVVPKERNMETF 566
509 PCAEDYLSVVLNQLCVLHKRTPVSDRVTKCTESLIVNRRPFCFSALBVDFTVVPKERNMETF 568
567 TFHADICTLSEKERQIKKQTAALVELVHKHPKATYKQLKAWMDPFAAFVEKCCAKADDKET 626
569 TFHADICTLSEKERQIKKQTAALVELVHKHPKATYKQLKAWMDPFAAFVEKCCAKADDKET 628
627 CFABEGKKLVAAASQAALGL 645
629 CFABEGKKLVAAASQAALGL 647

RESULT 4
US-11-175-690-212
Sequence 212, Application US/11175690
Publication No. US20060014254A1
GENERAL INFORMATION:
APPLICANT: Haseltine et al.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PE605
CURRENT APPLICATION NUMBER: US/11/175,690
CURRENT FILING DATE: 2005-07-07
PRIOR APPLICATION NUMBER: PCT/US04/001369
PRIOR FILING DATE: 2004-01-20
PRIOR APPLICATION NUMBER: US 60/441,305
PRIOR FILING DATE: 2003-01-22
PRIOR APPLICATION NUMBER: US 60/453,201
PRIOR FILING DATE: 2003-03-11
PRIOR APPLICATION NUMBER: US 60/467,222
PRIOR FILING DATE: 2003-05-02

RESULT 5
US-11-175-690-214
Sequence 214, Application US/11175690
Publication No. US20060014254A1
GENERAL INFORMATION:
APPLICANT: Haseltine et al.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PE605

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; CURRENT APPLICATION NUMBER: US/11/175,690
; CURRENT FILING DATE: 2005-07-07
; PRIOR APPLICATION NUMBER: PCT/US04/001369
; PRIOR FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: US 60/441,305
; PRIOR FILING DATE: 2003-01-22
; PRIOR APPLICATION NUMBER: US 60/453,201
; PRIOR FILING DATE: 2003-03-11
; PRIOR APPLICATION NUMBER: US 60/467,222
; PRIOR FILING DATE: 2003-05-02
; PRIOR APPLICATION NUMBER: US 60/472,816
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 60/476,267
; PRIOR FILING DATE: 2003-06-06
; PRIOR APPLICATION NUMBER: US 60/505,172
; PRIOR FILING DATE: 2003-09-24
; PRIOR APPLICATION NUMBER: US 60/506,746
; PRIOR FILING DATE: 2003-09-30
; NUMBER OF SEQ ID NOS: 568
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 214
; LENGTH: 648
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-11-175-690-214

Query Match          95.2%; Score 3253; DB 7; Length 648;
Best Local Similarity 99.4%; Pred. No. 5,8e-249;
Matches 616; Conservative 0; Mismatches 0; Indels 4; Gaps 1;

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RESULT 6
US-11-175-690-213
; Sequence 213, Application US/11175690
; Publication No. US20060014254A1
; GENERAL INFORMATION:
; APPLICANT: Haseletine et al.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF605
; CURRENT APPLICATION NUMBER: US/11/175,690
; CURRENT FILING DATE: 2005-07-07
; PRIOR APPLICATION NUMBER: PCT/US04/001369
; PRIOR FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: US 60/441,305
; PRIOR FILING DATE: 2003-01-22
; PRIOR APPLICATION NUMBER: US 60/453,201
; PRIOR FILING DATE: 2003-03-11
; PRIOR APPLICATION NUMBER: US 60/467,222
; PRIOR FILING DATE: 2003-05-02
; PRIOR APPLICATION NUMBER: US 60/472,816
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 60/476,267
; PRIOR FILING DATE: 2003-06-06
; PRIOR APPLICATION NUMBER: US 60/505,172
; PRIOR FILING DATE: 2003-09-24
; PRIOR APPLICATION NUMBER: US 60/506,746
; PRIOR FILING DATE: 2003-09-30
; NUMBER OF SEQ ID NOS: 568
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 213
; LENGTH: 649
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-11-175-690-213

Query Match          95.2%; Score 3252.5; DB 7; Length 649;
Best Local Similarity 99.2%; Pred. No. 6.4e-249;
Matches 616; Conservative 0; Mismatches 0; Indels 5; Gaps 1;

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Db 509 RMPGAEYIYLVVNLQCVLHEKTPVSDRVTKCTESLVNRRPFSALFVDETYVPEKFN 568
 Qy 565 EFTFPHADICTLSEKERQIKKQTAALVELVGHKPKATKEQLKAVMDPFAAFAVEKCKKADK 624
 Db 569 EFTFPHADICTLSEKERQIKKQTAALVELVGHKPKATKEQLKAVMDPFAAFAVEKCKKADK 628
 Qy 625 ETCFAEKGKLVVAASQAALGL 645
 Db 629 ETCFAEKGKLVVAASQAALGL 649

RESULT 7
 US-11-175-690-209
 ; Sequence 209, Application US/11175690
 ; Publication No. US20060014254A1
 ; GENERAL INFORMATION:
 ; APPLICANT: HaeselTine et al.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PP605
 ; CURRENT APPLICATION NUMBER: US/11/175,690
 ; PCT/US04/001369
 ; PRIOR FILING DATE: 2003-01-20
 ; PRIOR FILING DATE: 2004-01-20
 ; PRIOR FILING DATE: 2003-01-22
 ; PRIOR FILING DATE: 2003-03-11
 ; PRIOR FILING DATE: 2003-03-11
 ; PRIOR FILING DATE: 2003-05-02
 ; PRIOR APPLICATION NUMBER: US 60/4472,816
 ; PRIOR FILING DATE: 2003-05-23
 ; PRIOR APPLICATION NUMBER: US 60/476,267
 ; PRIOR FILING DATE: 2003-06-06
 ; PRIOR APPLICATION NUMBER: US 60/505,172
 ; PRIOR FILING DATE: 2003-09-24
 ; PRIOR APPLICATION NUMBER: US 60/506,746
 ; PRIOR FILING DATE: 2003-09-30
 ; NUMBER OF SEQ ID NOS: 568
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 209
 ; LENGTH: 650
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-11-175-690-209

Query Match 95.2%; Score 3252; DB 7; Length 650;
 Best Local Similarity 99.0%; Pred. No. 7e-249;
 Matches 616; Conservative 0; Mismatches 0; Indels 6; Gaps 1;

Qy 30 RHGGGTFTSDVSSYLEGQAAKEFLIAMLVYKGR-----DAHKSEVAHREKDLGSENFKALV 83
 Db 29 RHGGGTFTSDVSSYLEGQAAKEFLIAMLVYKGRDAHKSEVAHREKDLGSENFKALV 88
 Qy 84 LIAPAQYIQQCPPEHDKLVNVEVTEFAKTCVADSAENCDKSLHTLFGDKLCTVAATLRE 143
 Db 89 LIAPAQYIQQCPPEHDKLVNVEVTEFAKTCVADSAENCDKSLHTLFGDKLCTVAATLRE 148
 Qy 144 YGEMADCCAKQKQBERNECFLOHKDNDPMLPRLVPRPVDVWCTAFAHNEETPLKLYLVEI 203
 Db 149 YGEMADCCAKQKQBERNECFLOHKDNDPMLPRLVPRPVDVWCTAFAHNEETPLKLYLVEI 208
 Qy 204 RRHRYFYAPPELLFPAKRYKAAFTTECCQAADRAKACLLPKLDELDRGKASSAKORLKCASL 263
 Db 209 RRHRYFYAPPELLFPAKRYKAAFTTECCQAADRAKACLLPKLDELDRGKASSAKORLKCASL 268
 Qy 264 QKFGERAFKAVAVARLSQRFPAKAEPAEYVSKLVTTDLTKYHTSCCHGDLLEKADDRADLAKY 323
 Db 269 QKFGERAFKAVAVARLSQRFPAKAEPAEYVSKLVTTDLTKYHTSCCHGDLLEKADDRADLAKY 328
 Qy 324 ICENODSISYKLEKCEKPKLLEKSHCTAENVNDEMPADLPDLAADPFVSKDYCKKRYABAK 383
 Db 329 ICENODSISYKLEKCEKPKLLEKSHCTAENVNDEMPADLPDLAADPFVSKDYCKKRYABAK 388

Qy 384 DVELGMFLYEYARRHDDYGVLLIRLAKTYEETLLEKCCAAADPHECYAKVDFEKPJVE 443
 Db 389 DVELGMFLYEYARRHDDYGVLLIRLAKTYEETLLEKCCAAADPHECYAKVDFEKPJVE 448
 Qy 444 PGNLIKONCELFQELGEGYKQNALVRYTKKVPQVSTPPLVVEYRNIGVSKCGHPRA 503
 Db 449 PGNLIKONCELFQELGEGYKQNALVRYTKKVPQVSTPPLVVEYRNIGVSKCGHPRA 508
 Qy 504 KRMPCADYIYLVNQLCVLHEKTPVSDRVTKCTESLVNRRPFSALFVDETYVPEKFN 563
 Db 509 KRMPCADYIYLVNQLCVLHEKTPVSDRVTKCTESLVNRRPFSALFVDETYVPEKFN 568
 Qy 564 AETFTPHADICTLSEKERQIKKQTAALVELVGHKPKATKEQLKAVMDPFAAFAVEKCKKAD 623
 Db 569 AETFTPHADICTLSEKERQIKKQTAALVELVGHKPKATKEQLKAVMDPFAAFAVEKCKKAD 628
 Qy 624 KETCPAEKGGKLVVAASQAALGL 645
 Db 629 KETCPAEKGGKLVVAASQAALGL 650

RESULT 8
 US-11-175-690-224
 ; Sequence 224, Application US/11175690
 ; Publication No. US20060014254A1
 ; GENERAL INFORMATION:
 ; APPLICANT: HaeselTine et al.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PP605
 ; CURRENT APPLICATION NUMBER: US/11/175,690
 ; PCT/US04/001369
 ; PRIOR FILING DATE: 2003-01-20
 ; PRIOR FILING DATE: 2004-01-20
 ; PRIOR FILING DATE: 2003-01-22
 ; PRIOR FILING DATE: 2003-03-11
 ; PRIOR FILING DATE: 2003-03-11
 ; PRIOR FILING DATE: 2003-05-02
 ; PRIOR APPLICATION NUMBER: US 60/472,816
 ; PRIOR FILING DATE: 2003-05-23
 ; PRIOR APPLICATION NUMBER: US 60/476,267
 ; PRIOR FILING DATE: 2003-06-06
 ; PRIOR APPLICATION NUMBER: US 60/505,172
 ; PRIOR FILING DATE: 2003-09-24
 ; PRIOR APPLICATION NUMBER: US 60/506,746
 ; PRIOR FILING DATE: 2003-09-30
 ; NUMBER OF SEQ ID NOS: 568
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 224
 ; LENGTH: 651
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-11-175-690-224

Query Match 95.2%; Score 3251.5; DB 7; Length 651;
 Best Local Similarity 98.9%; Pred. No. 7.7e-249;
 Matches 616; Conservative 0; Mismatches 0; Indels 7; Gaps 1;

Qy 30 RHGGGTFTSDVSSYLEGQAAKEFLIAMLVYKGR-----DAHKSEVAHREKDLGSENFKALV 82
 Db 29 RHGGGTFTSDVSSYLEGQAAKEFLIAMLVYKGRDAHKSEVAHREKDLGSENFKALV 88
 Qy 83 VLIAPAQYIQQCPPEHDKLVNVEVTEFAKTCVADSAENCDKSLHTLFGDKLCTVAATLRE 142
 Db 89 VLIAPAQYIQQCPPEHDKLVNVEVTEFAKTCVADSAENCDKSLHTLFGDKLCTVAATLRE 148
 Qy 143 YGEMADCCAKQKQBERNECFLOHKDNDPMLPRLVPRPVDVWCTAFAHNEETPLKLYLVEI 202
 Db 149 YGEMADCCAKQKQBERNECFLOHKDNDPMLPRLVPRPVDVWCTAFAHNEETPLKLYLVEI 208
 Qy 203 ARRHRYFYAPPELLFPAKRYKAAFTTECCQAADRAKACLLPKLDELDRGKASSAKORLKCAS 262

Db 209 ARHHFYAPDELLFFAARFYKAAAFTECCOAAADKAACLLPKLDLDRDEGKASSAKORLKCAAS 268
 Qy 263 LQKRGERRAFKAAVAVRLSQRFPKAEFAEVSGLVDTLTKVHTTECCGGDILLECADDRAADLAK 322
 Db 269 LQKRGERRAFKAAVAVRLSQRFPKAEFAEVSGLVDTLTKVHTTECCGGDILLECADDRAADLAK 328
 Qy 323 YICENODSISSKLKECCERPLEKSHCIAEVENDEMPADLPSLAADFVESHKDCVKNVAEA 382
 Db 329 YICENODSISSKLKECCERPLEKSHCIAEVENDEMPADLPSLAADFVESHKDCVKNVAEA 388
 Qy 383 KQVPLGMFLYEYARRRHDPYSVLLRLAKTYETTLKCCAAADPHCEYAAVPRPFRPLVE 442
 Db 389 KQVPLGMFLYEYARRRHDPYSVLLRLAKTYETTLKCCAAADPHCEYAAVPRPFRPLVE 448
 Qy 443 EPQNLIKONCELFEOQGEYKFNALLVRYTKKVPQVSTPTLVEYSRNLGKVGSKCCKHP 502
 Db 449 EPQNLIKONCELFEOQGEYKFNALLVRYTKKVPQVSTPTLVEYSRNLGKVGSKCCKHP 508
 Qy 503 AKRMPCAEDYLSVNLQCVLHEKTPVSDRVTKCCCTESLVNRRPCFSALBVDETVYVPE 562
 Db 509 AKRMPCAEDYLSVNLQCVLHEKTPVSDRVTKCCCTESLVNRRPCFSALBVDETVYVPE 568
 Qy 563 NAETFTPHADICTLSEKEROIKKQTALEYLVKHKPKATKQQLKAVMDDPAAVFEKCCCKAD 622
 Db 569 NAETFTPHADICTLSEKEROIKKQTALEYLVKHKPKATKQQLKAVMDDPAAVFEKCCCKAD 628
 Qy 623 DKETCFABERGKLVAAASQAALGL 645
 Db 629 DKETCFABERGKLVAAASQAALGL 651

RESULT 9

US-11-175-690-218
 ? Sequence 218, Application US/11175690
 ? Publication No. US20060014254A1
 ? GENERAL INFORMATION:
 ? APPLICANT: Haseltine et al.
 ? TITLE OF INVENTION: Albumin Fusion Proteins
 ? FILE REFERENCE: PF605
 ? CURRENT APPLICATION NUMBER: US/11/175,690
 ? PRIOR FILING DATE: 2005-07-07
 ? PRIOR APPLICATION NUMBER: PCT/US04/001369
 ? PRIOR FILING DATE: 2004-01-20
 ? PRIOR APPLICATION NUMBER: US 60/441,305
 ? PRIOR FILING DATE: 2003-01-22
 ? PRIOR APPLICATION NUMBER: US 60/453,201
 ? PRIOR FILING DATE: 2003-03-11
 ? PRIOR APPLICATION NUMBER: US 60/467,222
 ? PRIOR FILING DATE: 2003-05-02
 ? PRIOR APPLICATION NUMBER: US 60/472,816
 ? PRIOR FILING DATE: 2003-05-23
 ? PRIOR APPLICATION NUMBER: US 60/476,267
 ? PRIOR FILING DATE: 2003-06-06
 ? PRIOR APPLICATION NUMBER: US 60/505,172
 ? PRIOR FILING DATE: 2003-09-24
 ? PRIOR APPLICATION NUMBER: US 60/506,746
 ? PRIOR FILING DATE: 2003-09-30
 ? NUMBER OF SEQ ID NOS: 568
 ? SOFTWARE: PatentIn Ver. 2.0
 ? SEQ ID NO 218
 ? LENGTH: 652
 ? TYPE: PRT
 ? ORGANISM: Homo sapiens
 US-11-175-690-218

Query Match 95.1%; Score 3251; DB 7; Length 652;
 Best Local Similarity 98.7%; Pred. No. 8,4e-249;
 Matches 616; Conservative 0; Mismatches 0; Indels 8; Gaps 1;

Db 29 RHGGGTFTSDVSSYLEGQAAYEFTAMLVKGR-----DAHKEVAHRRFDLGEENFKA 81
 Qy 30 RHGGGTFTSDVSSYLEGQAAYEFTAMLVKGR-----DAHKEVAHRRFDLGEENFKA 81
 Db 29 RHGGGTFTSDVSSYLEGQAAYEFTAMLVKGRDAHKEVAHRRFDLGEENFKA 88

Qy 82 LVIIAFAQYIQQCFPEFDHYKLVNEVTEPAKTCVADESSANCDKSLHTLFGDKLCTVYATLR 141
 Db 89 LVIIAFAQYIQQCFPEFDHYKLVNEVTEPAKTCVADESSANCDKSLHTLFGDKLCTVYATLR 148
 Qy 142 EHYGEMADCCAKOEPERNCEPLQHKDNPMLPRLVYREVDMCTAFHNDNEEFTLKKYLYE 201
 Db 149 EHYGEMADCCAKOEPERNCEPLQHKDNPMLPRLVYREVDMCTAFHNDNEEFTLKKYLYE 208
 Qy 202 IARRHFFYAPDELLFFAARFYKAAAFTECCOAAADKAACLLPKLDLDRDEGKASSAKORLKCA 261
 Db 209 IARRHFFYAPDELLFFAARFYKAAAFTECCOAAADKAACLLPKLDLDRDEGKASSAKORLKCA 268
 Qy 262 SLOKGERAFKAAVAVRLSQRFPKAEFAEVSGLVDTLTKVHTTECCGGDILLECADDRAADLAK 321
 Db 269 SLOKGERAFKAAVAVRLSQRFPKAEFAEVSGLVDTLTKVHTTECCGGDILLECADDRAADLAK 328
 Qy 322 KYICENODSISSKLKECCERPLEKSHCIAEVENDEMPADLPSLAADFVESHKDCVKNVAEA 381
 Db 329 KYICENODSISSKLKECCERPLEKSHCIAEVENDEMPADLPSLAADFVESHKDCVKNVAEA 388
 Qy 382 AKQVPLGMFLYEYARRRHDPYSVLLRLAKTYETTLKCCAAADPHCEYAAVPRPFRPLVE 441
 Db 389 AKQVPLGMFLYEYARRRHDPYSVLLRLAKTYETTLKCCAAADPHCEYAAVPRPFRPLVE 448
 Qy 442 EPQNLIKONCELFEOQGEYKFNALLVRYTKKVPQVSTPTLVEYSRNLGKVGSKCCKHP 501
 Db 449 EPQNLIKONCELFEOQGEYKFNALLVRYTKKVPQVSTPTLVEYSRNLGKVGSKCCKHP 508
 Qy 502 EAKRMPCAEDYLSVNLQCVLHEKTPVSDRVTKCCCTESLVNRRPCFSALBVDETVYVPE 561
 Db 509 EAKRMPCAEDYLSVNLQCVLHEKTPVSDRVTKCCCTESLVNRRPCFSALBVDETVYVPE 568
 Qy 562 FNAETFTPHADICTLSEKEROIKKQTALEYLVKHKPKATKQQLKAVMDDPAAVFEKCCCKCA 621
 Db 569 FNAETFTPHADICTLSEKEROIKKQTALEYLVKHKPKATKQQLKAVMDDPAAVFEKCCCKCA 628
 Qy 622 DDKETCFABERGKLVAAASQAALGL 645
 Db 629 DDKETCFABERGKLVAAASQAALGL 652

RESULT 10

US-11-175-690-215
 ? Sequence 215, Application US/11175690
 ? Publication No. US20060014254A1
 ? GENERAL INFORMATION:
 ? APPLICANT: Haseltine et al.
 ? TITLE OF INVENTION: Albumin Fusion Proteins
 ? FILE REFERENCE: PF605
 ? CURRENT APPLICATION NUMBER: US/11/175,690
 ? PRIOR FILING DATE: 2005-07-07
 ? PRIOR APPLICATION NUMBER: PCT/US04/001369
 ? PRIOR FILING DATE: 2004-01-20
 ? PRIOR APPLICATION NUMBER: US 60/441,305
 ? PRIOR FILING DATE: 2003-01-22
 ? PRIOR APPLICATION NUMBER: US 60/453,201
 ? PRIOR FILING DATE: 2003-03-11
 ? PRIOR APPLICATION NUMBER: US 60/467,222
 ? PRIOR FILING DATE: 2003-05-02
 ? PRIOR APPLICATION NUMBER: US 60/472,816
 ? PRIOR FILING DATE: 2003-05-23
 ? PRIOR APPLICATION NUMBER: US 60/476,267
 ? PRIOR FILING DATE: 2003-06-06
 ? PRIOR APPLICATION NUMBER: US 60/505,172
 ? PRIOR FILING DATE: 2003-09-24
 ? PRIOR APPLICATION NUMBER: US 60/506,746
 ? PRIOR FILING DATE: 2003-09-30
 ? NUMBER OF SEQ ID NOS: 568
 ? SOFTWARE: PatentIn Ver. 2.0
 ? SEQ ID NO 215
 ? LENGTH: 653
 ? TYPE: PRT

ORGANISM: Homo sapiens
US-11-175-690-215

Query Match 95.1%; Score 3250.5; DB 7; Length 653;
Best Local Similarity 98.6%; Pred. No. 9.2e-249;
Matches 616; Conservative 0; Mismatches 0; Indels 9; Gaps 1;

30 RHGGFTSDVSSYLEGQAARKEFIAMLVKGR-----DAHKSEVVAHRFKDLSGSEBNF 80
DB RHGGFTSDVSSYLEGQAARKEFIAMLVKGRDAHKSEVVAHRDAHKSEVVAHRFKDLSGSEBNF 88
QY ALVLIAPAOYLQOCPEFDHVKLVNVEVTEPAKTCVADSEANCDKSLHTLFGDKLCTVAT 140
DB ALVLIAPAOYLQOCPEFDHVKLVNVEVTEPAKTCVADSEANCDKSLHTLFGDKLCTVAT 148
QY 141 RETYGMADCCAKQEPERNECFLOHKDNPMLPRLVREVDVVMCTAFHNDNEETFLKRYL 200
DB 149 RETYGMADCCAKQEPERNECFLOHKDNPMLPRLVREVDVVMCTAFHNDNEETFLKRYL 208
QY 201 EIAARRHPPYAPABELLFPARKRYKAAFTCCQAADKAAACLLPKLDELDRDEGKASSAKORLKC 260
DB 209 EIAARRHPPYAPABELLFPARKRYKAAFTCCQAADKAAACLLPKLDELDRDEGKASSAKORLKC 268
QY 261 ASLQKFGERRAFKAWAVARLSORFPKAEPAEYSKLVTDLTKVHTCCGHDLLFCADDRADL 320
DB 269 ASLQKFGERRAFKAWAVARLSORFPKAEPAEYSKLVTDLTKVHTCCGHDLLFCADDRADL 328
QY 321 AKYICENODSISSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADFVSEKDVCKNYA 380
DB 329 AKYICENODSISSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADFVSEKDVCKNYA 388
QY 381 EAKDVFGLGMPFLYEYARRHDDYSVLLRLAKTYEFTLLEKCCAAADPHCECAKVFDEKPL 440
DB 389 EAKDVFGLGMPFLYEYARRHDDYSVLLRLAKTYEFTLLEKCCAAADPHCECAKVFDEKPL 448
QY 441 VEEPPQNLIKONCELEFQGLGEYKFNALLVRYTKKVPQVSTPTLVEVSRNLGKVSCKCKH 500
DB 449 VEEPPQNLIKONCELEFQGLGEYKFNALLVRYTKKVPQVSTPTLVEVSRNLGKVSCKCKH 508
QY 501 PEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCCSTESLVNRRPCFSALDEVDETYVP 560
DB 509 PEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCCSTESLVNRRPCFSALDEVDETYVP 568
QY 561 EFNAAETFTFHADICTLSEKERQIKKQNALVELVKHKPKATKQQLKAVMDPFAAFVEKCC 620
DB 569 EFNAAETFTFHADICTLSEKERQIKKQNALVELVKHKPKATKQQLKAVMDPFAAFVEKCC 628
QY 621 ADDKKECTCPAEEGKGLVAASQAALGL 645
DB 629 ADDKKECTCPAEEGKGLVAASQAALGL 653

RESULT 11

US-11-175-690-219
Sequence 219, Application US/11175690
Publication No. US20060014254A1
GENERAL INFORMATION:
APPLICANT: Haseltine et al.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: P6605
CURRENT APPLICATION NUMBER: US/11/175,690
CURRENT FILING DATE: 2005-07-07
PRIOR APPLICATION NUMBER: PCT/US04/001369
PRIOR FILING DATE: 2004-01-20
PRIOR APPLICATION NUMBER: US 60/441,305
PRIOR FILING DATE: 2003-01-22
PRIOR APPLICATION NUMBER: US 60/453,201
PRIOR FILING DATE: 2003-03-11
PRIOR APPLICATION NUMBER: US 60/467,222
PRIOR FILING DATE: 2003-05-02
PRIOR APPLICATION NUMBER: US 60/472,816
PRIOR FILING DATE: 2003-05-23
PRIOR APPLICATION NUMBER: US 60/476,267

PRIOR FILING DATE: 2003-06-06
PRIOR APPLICATION NUMBER: US 60/505,172
PRIOR FILING DATE: 2003-09-24
PRIOR APPLICATION NUMBER: US 60/506,746
PRIOR FILING DATE: 2003-09-30
NUMBER OF SEQ ID NOS: 568
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 219
LENGTH: 654
TYPE: PRT
ORGANISM: Homo sapiens
US-11-175-690-219

Query Match 95.1%; Score 3250; DB 7; Length 654;
Best Local Similarity 98.4%; Pred. No. 1e-248;
Matches 616; Conservative 0; Mismatches 0; Indels 10; Gaps 1;

30 RHGGFTSDVSSYLEGQAARKEFIAMLVKGR-----RDHKSEVVAHRFKDLSGSEBNF 79
DB RHGGFTSDVSSYLEGQAARKEFIAMLVKGRDAHKSEVVAHRDAHKSEVVAHRFKDLSGSEBNF 88
QY 80 KALVLIAPAOYLQOCPEFDHVKLVNVEVTEPAKTCVADSEANCDKSLHTLFGDKLCTVAT 139
DB 89 KALVLIAPAOYLQOCPEFDHVKLVNVEVTEPAKTCVADSEANCDKSLHTLFGDKLCTVAT 148
QY 140 RETYGMADCCAKQEPERNECFLOHKDNPMLPRLVREVDVVMCTAFHNDNEETFLKRYL 199
DB 149 RETYGMADCCAKQEPERNECFLOHKDNPMLPRLVREVDVVMCTAFHNDNEETFLKRYL 208
QY 200 YEIARRHPPYAPABELLFPARKRYKAAFTCCQAADKAAACLLPKLDELDRDEGKASSAKORLKC 259
DB 209 YEIARRHPPYAPABELLFPARKRYKAAFTCCQAADKAAACLLPKLDELDRDEGKASSAKORLKC 268
QY 260 CASLQKFGERRAFKAWAVARLSORFPKAEPAEYSKLVTDLTKVHTCCGHDLLFCADDRAD 319
DB 269 CASLQKFGERRAFKAWAVARLSORFPKAEPAEYSKLVTDLTKVHTCCGHDLLFCADDRAD 328
QY 320 LAKYICENODSISSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADFVSEKDVCKNYA 379
DB 329 LAKYICENODSISSKLKECCERKPLLEKSHCIAEVENDEMPADLPSLAADFVSEKDVCKNYA 388
QY 380 EAKDVFGLGMPFLYEYARRHDDYSVLLRLAKTYEFTLLEKCCAAADPHCECAKVFDEKPL 439
DB 389 EAKDVFGLGMPFLYEYARRHDDYSVLLRLAKTYEFTLLEKCCAAADPHCECAKVFDEKPL 448
QY 440 LVSEPPQNLIKONCELEFQGLGEYKFNALLVRYTKKVPQVSTPTLVEVSRNLGKVSCKCKH 499
DB 449 LVSEPPQNLIKONCELEFQGLGEYKFNALLVRYTKKVPQVSTPTLVEVSRNLGKVSCKCKH 508
QY 500 HPEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCCSTESLVNRRPCFSALDEVDETYVP 559
DB 509 HPEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCCSTESLVNRRPCFSALDEVDETYVP 568
QY 560 KEFNAAETFTFHADICTLSEKERQIKKQNALVELVKHKPKATKQQLKAVMDPFAAFVEKCC 619
DB 569 KEFNAAETFTFHADICTLSEKERQIKKQNALVELVKHKPKATKQQLKAVMDPFAAFVEKCC 628
QY 620 KADDKKECTCPAEEGKGLVAASQAALGL 645
DB 629 KADDKKECTCPAEEGKGLVAASQAALGL 654

RESULT 12

US-11-175-690-210
Sequence 210, Application US/11175690
Publication No. US20060014254A1
GENERAL INFORMATION:
APPLICANT: Haseltine et al.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: P6605
CURRENT APPLICATION NUMBER: US/11/175,690
CURRENT FILING DATE: 2005-07-07
PRIOR APPLICATION NUMBER: PCT/US04/001369

```

; PRIOR FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: US 60/441,305
; PRIOR FILING DATE: 2003-01-22
; PRIOR APPLICATION NUMBER: US 60/453,201
; PRIOR FILING DATE: 2003-03-11
; PRIOR APPLICATION NUMBER: US 60/467,222
; PRIOR FILING DATE: 2003-05-02
; PRIOR APPLICATION NUMBER: US 60/472,816
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 60/476,267
; PRIOR FILING DATE: 2003-06-06
; PRIOR APPLICATION NUMBER: US 60/505,172
; PRIOR FILING DATE: 2003-09-24
; PRIOR APPLICATION NUMBER: US 60/506,746
; PRIOR FILING DATE: 2003-09-30
; NUMBER OF SEQ ID NOS: 568
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 210
; LENGTH: 658
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-175-690-210

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Query Match 95.1%; Score 3250; DB 7; Length 658;
Best Local Similarity 96.0%; Pred. No. 1e-248;
Matches 619; Conservative 1; Mismatches 9; Indels 16; Gaps 1;

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QY 1 HGGGFTSDVSSYLEGQAQKEFIAMLVKGRHGEGFTSDVSSYLEGQAQKEFIAMLVKGR 60
DB 30 HGGGFTSDVSSYLEGQAQKEFIAMLVKGR-----DAHKSEVAHRFKDLSGEEN 73
QY 61 DAHKSEVAHRFKDLSGEENFKALVLIAPAOYLQCCPFEDHVKLVNVEVTEFAKTCVADESAAE 120
DB 74 DAHKSEVAHRFKDLSGEENFKALVLIAPAOYLQCCPFEDHVKLVNVEVTEFAKTCVADESAAE 133
QY 121 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPERNRCFLQHKDNDPMLPRLVPEV 180
DB 134 NCDKSLHTLFGDKLCTVAATLRETYGEMADCCAKQEPERNRCFLQHKDNDPMLPRLVPEV 193
QY 181 DVMCTAHPNDNEFTFLKYLVEIARRHNYFPARPELLFPARKRYKAAPTECCQAADKACLLP 240
DB 194 DVMCTAHPNDNEFTFLKYLVEIARRHNYFPARPELLFPARKRYKAAPTECCQAADKACLLP 253
QY 241 KLDLRLDEGKASSAKORLYKCSLQKFGERRAFKAAVAVARLSQRFPKAPFAVSVKLVTDLTK 300
DB 254 KLDLRLDEGKASSAKORLYKCSLQKFGERRAFKAAVAVARLSQRFPKAPFAVSVKLVTDLTK 313
QY 301 VHTTECCGDDLLLECADRDLAKTI CENQDSSISKLKECCERPLLEKSHCIABVENDMPA 360
DB 314 VHTTECCGDDLLLECADRDLAKTI CENQDSSISKLKECCERPLLEKSHCIABVENDMPA 373
QY 361 DLPSLIADPVESSDVCQNVAVAKDVFGLMFLYEFARRHNPYSVVLLRLAKTYETTLTEKC 420
DB 374 DLPSLIADPVESSDVCQNVAVAKDVFGLMFLYEFARRHNPYSVVLLRLAKTYETTLTEKC 433
QY 421 CAAADPHECYAKVDFEERKPLVEEPONLIKONCELLFEOGGEYKFNALLVYTKKVPQVST 480
DB 434 CAAADPHECYAKVDFEERKPLVEEPONLIKONCELLFEOGGEYKFNALLVYTKKVPQVST 493
QY 481 PTLVEVSRLGKVGSKCCCKHPEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCTTES 540
DB 494 PTLVEVSRLGKVGSKCCCKHPEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCTTES 553
QY 541 LVNRRPFSALVEVDYTYVPPVERNAFTTFHADICTTSEKERQIKKOTALVLEIVVGHREKAT 600
DB 554 LVNRRPFSALVEVDYTYVPPVERNAFTTFHADICTTSEKERQIKKOTALVLEIVVGHREKAT 613
QY 601 KEOLKAVMDPFAFAVEKCKCADDDKTCFAEBGKGLVVAASQALGL 645
DB 614 KEOLKAVMDPFAFAVEKCKCADDDKTCFAEBGKGLVVAASQALGL 658

```

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US-11-175-690-220
; Sequence 220, Application US/11175690
; Publication No. US20060014254A1
; GENERAL INFORMATION:
; APPLICANT: Haseltine et al.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF605
; CURRENT APPLICATION NUMBER: US/11/175,690
; CURRENT FILING DATE: 2005-07-07
; PRIOR APPLICATION NUMBER: PCT/US04/001369
; PRIOR FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: US 60/441,305
; PRIOR FILING DATE: 2003-01-22
; PRIOR APPLICATION NUMBER: US 60/453,201
; PRIOR FILING DATE: 2003-03-11
; PRIOR APPLICATION NUMBER: US 60/467,222
; PRIOR FILING DATE: 2003-05-02
; PRIOR APPLICATION NUMBER: US 60/472,816
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 60/476,267
; PRIOR FILING DATE: 2003-06-06
; PRIOR APPLICATION NUMBER: US 60/505,172
; PRIOR FILING DATE: 2003-09-24
; PRIOR APPLICATION NUMBER: US 60/506,746
; NUMBER OF SEQ ID NOS: 568
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 220
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-175-690-220

```

```

Query Match 95.1%; Score 3249.5; DB 7; Length 655;
Best Local Similarity 98.2%; Pred. No. 1.1e-248;
Matches 616; Conservative 0; Mismatches 0; Indels 11; Gaps 1;

```

```

QY 30 RHGEGFTSDVSSYLEGQAQKEFIAMLVKGR-----DAHKSEVAHRFKDLSGEEN 78
DB 29 RHGEGFTSDVSSYLEGQAQKEFIAMLVKGRDHKSEVAHRFKDLSGEEN 88
QY 79 FKALVLIAPAOYLQCCPFEDHVKLVNVEVTEFAKTCVADESAAECDKSLHTLFGDKLCTVA 138
DB 89 FKALVLIAPAOYLQCCPFEDHVKLVNVEVTEFAKTCVADESAAECDKSLHTLFGDKLCTVA 148
QY 139 TLRETYGEMADCCAKQEPERNRCFLQHKDNDPMLPRLVPEVDMCTAHPNDNEFTFLKXY 198
DB 149 TLRETYGEMADCCAKQEPERNRCFLQHKDNDPMLPRLVPEVDMCTAHPNDNEFTFLKXY 208
QY 199 LVEIARRHNPYFPARPELLFPARKRYKAAPTECCQAADKACLLPKLDLRLDEGKASSAKORLY 258
DB 209 LVEIARRHNPYFPARPELLFPARKRYKAAPTECCQAADKACLLPKLDLRLDEGKASSAKORLY 268
QY 259 KCSLSLQKFGERRAFKAAVAVARLSQRFPKAPFAVSVKLVTDLTKVHTTECCGDDLLLECADRDA 318
DB 269 KCSLSLQKFGERRAFKAAVAVARLSQRFPKAPFAVSVKLVTDLTKVHTTECCGDDLLLECADRDA 328
QY 319 DLAKTYI CENQDSSISKLKECCERPLLEKSHCIAEVENDEMPADLPSLIADPVESSKDVCKN 378
DB 329 DLAKTYI CENQDSSISKLKECCERPLLEKSHCIAEVENDEMPADLPSLIADPVESSKDVCKN 388
QY 379 YABAKDVFGLMFLYEFARRHNPYSVVLLRLAKTYETTLTEKCAAADPHECYAKVDFEERK 438
DB 389 YABAKDVFGLMFLYEFARRHNPYSVVLLRLAKTYETTLTEKCAAADPHECYAKVDFEERK 448
QY 439 PLVEEPONLIKONCELLFEOGGEYKFNALLVYTKKVPQVSTPLVEVSRLGKVGSKCC 498
DB 449 PLVEEPONLIKONCELLFEOGGEYKFNALLVYTKKVPQVSTPLVEVSRLGKVGSKCC 508
QY 499 KHPKARMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCTTESLVNRRPFSALVEVDYTY 558
DB 509 KHPKARMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCTTESLVNRRPFSALVEVDYTY 568

```


Qy 559 PKEFNAETFTFHADICTLSEKERQIKKQTALVVELVHKRPKATKTEQLKAVMDDPFAAFVEK 618
 |||||
 Db 569 PKEFNAETFTFHADICTLSEKERQIKKQTALVVELVHKRPKATKTEQLKAVMDDPFAAFVEK 628
 Qy 619 CKADDKERTCFABEGKKLVAASQAALGL 645
 Db 629 CKADDKERTCFABEGKKLVAASQAALGL 655

RESULT 14

US-11-175-690-225
 ; Sequence 225, Application US/11175690
 ; Publication No. US20060014254A1
 GENERAL INFORMATION:
 ; APPLICANT: Haselctine et al.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PR605
 ; CURRENT APPLICATION NUMBER: US/11/175,690
 ; PCT/US04/001369
 ; PRIOR APPLICATION NUMBER: 2005-07-07
 ; PRIOR FILING DATE: 2004-01-20
 ; PRIOR APPLICATION NUMBER: US 60/441,305
 ; PRIOR FILING DATE: 2003-01-22
 ; PRIOR APPLICATION NUMBER: US 60/453,201
 ; PRIOR FILING DATE: 2003-03-11
 ; PRIOR APPLICATION NUMBER: US 60/467,222
 ; PRIOR FILING DATE: 2003-05-02
 ; PRIOR APPLICATION NUMBER: US 60/472,816
 ; PRIOR FILING DATE: 2003-05-23
 ; PRIOR APPLICATION NUMBER: US 60/476,267
 ; PRIOR FILING DATE: 2003-06-06
 ; PRIOR APPLICATION NUMBER: US 60/505,172
 ; PRIOR FILING DATE: 2003-09-24
 ; PRIOR APPLICATION NUMBER: US 60/506,746
 ; PRIOR FILING DATE: 2003-09-30
 ; NUMBER OF SEQ ID NOS: 568
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 225
 ; LENGTH: 656
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-11-175-690-225

Query Match 95.1%; Score 3249; DB 7; Length 656;
 Best Local Similarity 98.1%; Pred. No. 1.2e-248;
 Matches 616; Conservative 0; Mismatches 0; Indels 12; Gaps 1;

Qy 30 RHGGGTFTSVSSYLBGOAKERTIAMLVKGR-----DAHSEVARRPKDAGEE 77
 |||||
 Db 29 RHGGGTFTSVSSYLBGOAKERTIAMLVKGRDAHSEVARRPKDAGEE 88
 Qy 78 NPKALVLIAPAOYLQOCPPEBDHVKLVNEVTEBFAKTCVADESANENCDKSLHTLFGDKLCTV 137
 |||||
 Db 89 NPKALVLIAPAOYLQOCPPEBDHVKLVNEVTEBFAKTCVADESANENCDKSLHTLFGDKLCTV 148
 Qy 138 ATLRETYGEMADCCAKQEBERNECFLOHKDNDPNI.PRLVPRPVDMCTAFHNDNEETFLK 197
 |||||
 Db 149 ATLRETYGEMADCCAKQEBERNECFLOHKDNDPNI.PRLVPRPVDMCTAFHNDNEETFLK 208
 Qy 198 YLVEIARRHPFYAPPELLFFAKRYKAAFTTECCQAADKAACLLPKLDLDRDGGKASSAKOR 257
 |||||
 Db 209 YLVEIARRHPFYAPPELLFFAKRYKAAFTTECCQAADKAACLLPKLDLDRDGGKASSAKOR 268
 Qy 258 LKCASTLQKFGERRAKAVAVARLSQRFPKABEAVYSKLVTDLTKVHTTECGHGDLLLECADDR 317
 |||||
 Db 269 LKCASTLQKFGERRAKAVAVARLSQRFPKABEAVYSKLVTDLTKVHTTECGHGDLLLECADDR 328
 Qy 318 ADLAKYTCENODSISSKLKECCERPLLEKSHCIARVENDENRPAULPGLAADPVNSKOVCK 377
 |||||
 Db 329 ADLAKYTCENODSISSKLKECCERPLLEKSHCIARVENDENRPAULPGLAADPVNSKOVCK 388
 Qy 378 NYAEAKDVLGMPFLYEYARRHPDYSVVLRLAKTYETTLKCCQAADPHECVAKVDFE 437
 |||||

Db 389 NYAEAKDVLGMPFLYEYARRHPDYSVVLRLAKTYETTLKCCQAADPHECVAKVDFE 448
 Qy 438 KPLVEBPONLIKONCELPOLGEGYKFOANLLVYTKKVPQVSTPTLVEVSRMLGKVSJK 497
 |||||
 Db 449 KPLVEBPONLIKONCELPOLGEGYKFOANLLVYTKKVPQVSTPTLVEVSRMLGKVSJK 508
 Qy 498 CKHPEAKRMPCAEDYLSVYLINQICVJHEKTPVSDRVTKCTESLVNRRPQFSALBEVDETY 557
 |||||
 Db 509 CKHPEAKRMPCAEDYLSVYLINQICVJHEKTPVSDRVTKCTESLVNRRPQFSALBEVDETY 568
 Qy 558 VPKEFNAETFTFHADICTLSEKERQIKKQTALVVELVHKRPKATKTEQLKAVMDDPFAAFVEK 617
 |||||
 Db 569 VPKEFNAETFTFHADICTLSEKERQIKKQTALVVELVHKRPKATKTEQLKAVMDDPFAAFVEK 628
 Qy 618 CKADDKERTCFABEGKKLVAASQAALGL 645
 Db 629 CKADDKERTCFABEGKKLVAASQAALGL 656

RESULT 15

US-11-175-690-216
 ; Sequence 216, Application US/11175690
 ; Publication No. US20060014254A1
 GENERAL INFORMATION:
 ; APPLICANT: Haselctine et al.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PR605
 ; CURRENT APPLICATION NUMBER: US/11/175,690
 ; PCT/US04/001369
 ; PRIOR APPLICATION NUMBER: 2005-07-07
 ; PRIOR FILING DATE: 2004-01-20
 ; PRIOR APPLICATION NUMBER: US 60/441,305
 ; PRIOR FILING DATE: 2003-01-22
 ; PRIOR APPLICATION NUMBER: US 60/453,201
 ; PRIOR FILING DATE: 2003-03-11
 ; PRIOR APPLICATION NUMBER: US 60/467,222
 ; PRIOR FILING DATE: 2003-05-02
 ; PRIOR APPLICATION NUMBER: US 60/472,816
 ; PRIOR FILING DATE: 2003-05-23
 ; PRIOR APPLICATION NUMBER: US 60/476,267
 ; PRIOR FILING DATE: 2003-06-06
 ; PRIOR APPLICATION NUMBER: US 60/505,172
 ; PRIOR FILING DATE: 2003-09-24
 ; PRIOR APPLICATION NUMBER: US 60/506,746
 ; PRIOR FILING DATE: 2003-09-30
 ; NUMBER OF SEQ ID NOS: 568
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 216
 ; LENGTH: 657
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-11-175-690-216

Query Match 95.1%; Score 3248.5; DB 7; Length 657;
 Best Local Similarity 97.9%; Pred. No. 1.3e-248;
 Matches 616; Conservative 0; Mismatches 0; Indels 13; Gaps 1;

Qy 30 RHGGGTFTSVSSYLBGOAKERTIAMLVKGR-----DAHSEVARRPKDAGEE 76
 |||||
 Db 29 RHGGGTFTSVSSYLBGOAKERTIAMLVKGRDAHSEVARRPKDAGEE 88
 Qy 77 ENPKALVLIAPAOYLQOCPPEBDHVKLVNEVTEBFAKTCVADESANENCDKSLHTLFGDKLCT 136
 |||||
 Db 89 ENPKALVLIAPAOYLQOCPPEBDHVKLVNEVTEBFAKTCVADESANENCDKSLHTLFGDKLCT 148
 Qy 137 VATLRETYGEMADCCAKQEBERNECFLOHKDNDPNI.PRLVPRPVDMCTAFHNDNEETFLK 196
 |||||
 Db 149 VATLRETYGEMADCCAKQEBERNECFLOHKDNDPNI.PRLVPRPVDMCTAFHNDNEETFLK 208
 Qy 197 KYLVEIARRHPFYAPPELLFFAKRYKAAFTTECCQAADKAACLLPKLDLDRDGGKASSAKO 256
 |||||
 Db 209 KYLVEIARRHPFYAPPELLFFAKRYKAAFTTECCQAADKAACLLPKLDLDRDGGKASSAKO 268

```

OY 257 RIKCASLQKFGERRAFKAWAVARLSQRFPAEFAEVSKLVTDLTKVHTTECCHGDLLECADD 316
    |||
DB 269 RIKCASLQKFGERRAFKAWAVARLSQRFPAEFAEVSKLVTDLTKVHTTECCHGDLLECADD 328
    |||
OY 317 RADLAKYICENODSISSSKLECCCEKPLLEKSHCIAEVNDMPADLPSLAADPVEKDYC 376
    |||
DB 329 RADLAKYICENODSISSSKLECCCEKPLLEKSHCIAEVNDMPADLPSLAADPVEKDYC 388
    |||
OY 377 KNYAEAKDVFILGWFLEYEARRHDPYSVLLLRLLAKTYETTLKCCAAADPHECYAKVPE 436
    |||
DB 389 KNYAEAKDVFILGWFLEYEARRHDPYSVLLLRLLAKTYETTLKCCAAADPHECYAKVPE 448
    |||
OY 437 FKPLVEEPONLIKONCELFEOLGKYPONALLVRYTKVQVSTPTLVEVSRNLGKVGSK 496
    |||
DB 449 FKPLVEEPONLIKONCELFEOLGKYPONALLVRYTKVQVSTPTLVEVSRNLGKVGSK 508
    |||
OY 497 CCKHPEAKMPCABDYLSVVLNQLCVLHEKTPVSDRYTKCCTESLVNRRPCFSALVDEET 556
    |||
DB 509 CCKHPEAKMPCABDYLSVVLNQLCVLHEKTPVSDRYTKCCTESLVNRRPCFSALVDEET 568
    |||
OY 557 YVPEEENAEFTFTHADICTLSEKERQIKKOTALVBLVGHKPKATKBOLEKAVMDDPFAAFVE 616
    |||
DB 569 YVPEEENAEFTFTHADICTLSEKERQIKKOTALVBLVGHKPKATKBOLEKAVMDDPFAAFVE 628
    |||
OY 617 KCCKADDKETCFABEGKLVAAASQAALGL 645
    |||
DB 629 KCCKADDKETCFABEGKLVAAASQAALGL 657
    |||

```

Search completed: April 19, 2006, 12:36:42
 Job time : 22.5305 secs

GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 19, 2006, 11:56:31 ; Search time 21.1122 Seconds
(without alignments)
1852.232 Million cell updates/sec

Title: US-10-775-180-449
Perfect score: 465
Sequence: 1 MNIFRFLFLSLFVQGLHHT.....SSYLEGQAKKFIWLVKGR 89

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2443163 seqs, 439378781 residues

Total number of hits satisfying chosen parameters: 2443163

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Genesep_21:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*
9: geneseqp2005s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	465	100.0	89	ADP16195	Adf16195 Human alb
2	465	100.0	89	ADH21652	Adh21652 Human GLP
3	465	100.0	673	ADP17044	Adp17044 Human alb
4	465	100.0	673	ADH22037	Adh22037 Mouse alb
5	465	100.0	674	ADP16193	Adp16193 Human alb
6	465	100.0	674	ADH21650	Adh21650 Human alb
7	465	100.0	674	ADW45202	Adw45202 K. lactis
8	465	100.0	915	ADW45204	Adw45204 K. lactis
9	341.5	73.4	669	ADP16144	Adp16144 Human alb
10	341.5	73.4	669	ADH21622	Adh21622 Human alb
11	341	73.3	145	ADP16688	Adp16688 Human GLP
12	341	73.3	145	ADH21888	Adh21888 Human GLP
13	341	73.3	145	ADP16525	Adp16525 Human alb
14	341	73.3	145	ADH21813	Adh21813 Human alb
15	335.5	72.2	669	ADP16150	Adp16150 Human alb
16	335.5	72.2	669	ADH21628	Adh21628 Human alb
17	335	72.0	145	ADP16690	Adp16690 Human alb
18	335	72.0	145	ADH21890	Adh21890 Human GLP
19	335	72.0	730	ADP16527	Adp16527 Human alb
20	329.5	70.9	669	ADH21815	Adh21815 Human alb
21	329.5	70.9	669	ADP16149	Adp16149 Human alb
22	329.5	70.9	669	ADH21648	Adh21648 Human alb
23	329.5	70.9	669	ADP16145	Adp16145 Human alb
24	329.5	70.9	669	ADH21616	Adh21616 Human alb

Result No.	Score	Query Match	Length	DB ID	Description
25	329.5	70.9	669	ADH21624	Adh21624 Human alb
26	329.5	70.9	669	ADH21626	Adh21626 Human alb
27	329.5	70.9	669	ADH21623	Adh21623 Human alb
28	329.5	70.9	669	ADH21627	Adh21627 Human alb
29	324	69.7	83	ADP16687	Adp16687 Human GLP
30	324	69.7	83	ADH21887	Adh21887 Human GLP
31	324	69.7	668	ADP16524	Adp16524 Human alb
32	324	69.7	668	ADH21812	Adh21812 Human alb
33	319	68.6	77	ADP16689	Adp16689 Human GLP
34	319	68.6	77	ADH21889	Adh21889 Human GLP
35	319	68.6	662	ADP16526	Adp16526 Human alb
36	319	68.6	662	ADH21814	Adh21814 Human alb
37	318	68.4	83	ADP16691	Adp16691 Human GLP
38	318	68.4	83	ADH21891	Adh21891 Human GLP
39	318	68.4	668	ADP16528	Adp16528 Human alb
40	318	68.4	668	ADH21816	Adh21816 Human alb
41	317.5	68.3	664	ADP16510	Adp16510 Human alb
42	317.5	68.3	664	ADH21801	Adh21801 Human alb
43	317.5	68.2	647	ADW45208	Adw45208 K. lactis
44	315.5	67.8	663	ADP16512	Adp16512 Human alb
45	315.5	67.8	663	ADH21803	Adh21803 Human alb

ALIGNMENTS

RESULT 1
ADP16195
ID ADP16195 standard; protein; 89 AA.
XX ADP16195;
AC
XX
AC
XX
DT 12-FEB-2004 (first entry)
XX
DE Human albumin fusion protein-related protein SegID1282.
XX
XX albumin fusion protein; albumin activity; human serum albumin;
KW serum osmotic pressure; shelf-life; stability; antidiabetic;
KW gene therapy; diabetes mellitus; human.
XX
XX Homo sapiens.
OS
XX
XX MO2003060071-A2.
XX
XX
XX 24-JUL-2003.
XX
XX
XX 23-DEC-2002; 2002WC-US040891.
XX
XX
XX 21-DEC-2001; 2001US-0341811P.
PR 24-JAN-2002; 2002US-0350358P.
PR 26-JAN-2002; 2002US-0351360P.
PR 26-FEB-2002; 2002US-0359370P.
PR 28-FEB-2002; 2002US-0360000P.
PR 27-MAR-2002; 2002US-0367500P.
PR 08-APR-2002; 2002US-0370227P.
PR 10-MAY-2002; 2002US-0378950P.
PR 24-MAY-2002; 2002US-0382612P.
PR 28-MAY-2002; 2002US-0383123P.
PR 05-JUN-2002; 2002US-0385708P.
PR 10-JUL-2002; 2002US-0394625P.
PR 24-JUL-2002; 2002US-0398008P.
PR 09-AUG-2002; 2002US-0402131P.
PR 13-AUG-2002; 2002US-0402708P.
PR 18-SEP-2002; 2002US-0411355P.
PR 18-SEP-2002; 2002US-0411426P.
PR 02-OCT-2002; 2002US-0414984P.
PR 11-OCT-2002; 2002US-0417611P.
PR 23-OCT-2002; 2002US-0420246P.
PR 05-NOV-2002; 2002US-0423623P.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
XX (DELTZ) DELTA BIOTECHNOLOGY LTD.
XX (PRIN-) PRINCIPALIA PHARM CORP.

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XX 08-APR-2002; 2002US-0370227P.
PI 10-MAY-2002; 2002US-0378950P.
XX 24-JUL-2002; 2002US-0398008P.
DR 09-AUG-2002; 2002US-0402131P.
XX N-PSDB; ADP16194.
XX 13-AUG-2002; 2002US-0402708P.
XX 18-SEP-2002; 2002US-0411355P.
XX 02-OCT-2002; 2002US-0419849P.
XX 11-OCT-2002; 2002US-0417611P.
XX 23-OCT-2002; 2002US-0420246P.
XX 05-NOV-2002; 2002US-0423623P.
XX (HUMA-) HUMAN GENOME SCI INC.
XX Rosen CA, Haseeltine WA;
XX WPI; 2003-598517/56.
XX N-PSDB; ADP16194.
XX New albumin fusion protein, useful for preparing a composition for
XX treating diabetes mellitus.
XX Example 4; SEQ ID NO 1282; 24pp; English.
XX This invention relates to a novel albumin fusion protein having albumin
XX or biological activity. Human serum albumin is responsible for a
XX significant proportion of the osmotic pressure of serum and also
XX functions as a carrier of endogenous and exogenous ligands. The fusion of
XX albumin to a therapeutic protein may increase shelf-life and stability of
XX the therapeutic protein. The albumin fusion protein of the invention may
XX allow production of compositions with antidiabetic activity whilst the
XX nucleotide sequence which encodes it may be useful for gene therapy. The
XX albumin fusion protein is useful for preparing a composition for treating
XX diabetes mellitus. The present sequence is that of a therapeutic protein
XX which was fused with human albumin to create a novel albumin fusion
XX protein of the invention. Note: The sequence data for this patent did not
XX form part of the printed specification, but was obtained in electronic
XX format directly from WIPO at ftp.wipo.int/pub/publishedpct_sequences
XX Sequence 89 AA;
XX
XX Query Match          100.0%; Score 465; DB 7; Length 89;
XX Best Local Similarity 100.0%; Pred. No. 1.3e-45;
XX Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 MNIFYFLFLSPVQGLIETHRRGSLDKRHGGTFTSDVSSYLEGQAQAKRFIAMLVKGRH 60
XX | 1 MNIFYFLFLSPVQGLIETHRRGSLDKRHGGTFTSDVSSYLEGQAQAKRFIAMLVKGRH 60
XX | 1 MNIFYFLFLSPVQGLIETHRRGSLDKRHGGTFTSDVSSYLEGQAQAKRFIAMLVKGRH 60
XX | 61 GEGTFTSDVSSYLEGQAQAKRFIAMLVKGR 89
XX | 61 GEGTFTSDVSSYLEGQAQAKRFIAMLVKGR 89
XX | 61 GEGTFTSDVSSYLEGQAQAKRFIAMLVKGR 89
XX
XX RESULT 2
XX ID ADH21652 standard; protein; 89 AA.
XX ADH21652;
XX ADH21652;
XX 11-MAR-2004 (first entry)
XX Human GLP-1(7-36(A8G))x2, SEQ ID NO:449.
XX
XX Fusion protein; human serum albumin; HSA; therapeutic protein;
XX shelf-life; in vitro biological activity; in vivo biological activity;
XX metabolic disorder; endocrine disorder; diabetes; type 1; type 2;
XX diabetes-related condition; hyperglycaemia; neural disorder; neuropathy;
XX retinopathy; cardiovascular disorder; heart disease; renal disorder;
XX obesity; glucose level maintenance; weight loss; antidiabetic; cardiact;
XX anorectic; ophthalmological; gene therapy; mutant; muten.
XX
XX Synthetic.
XX Homo sapiens.
XX WO2003059934-A2.
XX
XX 24-JUL-2003.
XX
XX 23-DEC-2002; 2002WO-US040892.
XX
XX 21-DEC-2001; 2001US-0341811P.
XX 24-JAN-2002; 2002US-0350358P.
XX 26-FEB-2002; 2002US-0359370P.
XX 28-FEB-2002; 2002US-0360000P.
XX 27-MAR-2002; 2002US-0367500P.

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PR 08-APR-2002; 2002US-0370227P.
PR 10-MAY-2002; 2002US-0378950P.
XX 24-JUL-2002; 2002US-0398008P.
PR 09-AUG-2002; 2002US-0402131P.
XX 13-AUG-2002; 2002US-0402708P.
XX 18-SEP-2002; 2002US-0411355P.
XX 02-OCT-2002; 2002US-0419849P.
XX 11-OCT-2002; 2002US-0417611P.
XX 23-OCT-2002; 2002US-0420246P.
XX 05-NOV-2002; 2002US-0423623P.
XX (HUMA-) HUMAN GENOME SCI INC.
XX Rosen CA, Haseeltine WA;
XX WPI; 2003-598510/56.
XX N-PSDB; ADH21651.
XX New albumin fusion protein, useful for preparing a composition for
XX treating diabetes mellitus.
XX Disclosure; SEQ ID NO 449; 1086pp; English.
XX
XX The invention relates to fusion proteins comprising human serum albumin
XX (ADH21550) and a therapeutic polypeptide such as a therapeutic protein,
XX antibody or peptide or their variants or fragments. The therapeutic
XX protein may be fused to the N-terminus, the C-terminus or both termini of
XX albumin via a linker. The albumin component of the fusion proteins
XX prolongs the shelf-life and the in vitro and vivo biological activity of
XX the proteins compared with those of the corresponding therapeutic
XX proteins on their own. The invention also relates to nucleic acids
XX encoding albumin fusion proteins, vectors and host cells comprising an
XX albumin fusion protein nucleic acid, compositions and kits comprising an
XX albumin fusion protein, the method of expressing the shelf-life of a
XX therapeutic protein by fusion with albumin, and the treatment of disease
XX using an albumin fusion protein. The albumin fusion proteins may be used
XX in the treatment of metabolic/endocrine disorders, diabetes and diabetes-
XX related conditions. Specifically the albumin fusion proteins may be used
XX to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders
XX (especially neuropathy), retinopathy, cardiovascular disorders
XX (especially heart disease, renal disorders and obesity). The proteins may
XX also be used in a method of maintaining a basal glucose level in a
XX patient and in a method for losing weight. The present sequence is
XX related to the invention.
XX Sequence 89 AA;
XX
XX Query Match          100.0%; Score 465; DB 7; Length 89;
XX Best Local Similarity 100.0%; Pred. No. 1.3e-45;
XX Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 MNIFYFLFLSPVQGLIETHRRGSLDKRHGGTFTSDVSSYLEGQAQAKRFIAMLVKGRH 60
XX | 1 MNIFYFLFLSPVQGLIETHRRGSLDKRHGGTFTSDVSSYLEGQAQAKRFIAMLVKGRH 60
XX | 1 MNIFYFLFLSPVQGLIETHRRGSLDKRHGGTFTSDVSSYLEGQAQAKRFIAMLVKGRH 60
XX | 61 GEGTFTSDVSSYLEGQAQAKRFIAMLVKGR 89
XX | 61 GEGTFTSDVSSYLEGQAQAKRFIAMLVKGR 89
XX | 61 GEGTFTSDVSSYLEGQAQAKRFIAMLVKGR 89
XX
XX RESULT 3
XX ID ADF17044 standard; protein; 673 AA.
XX ADF17044;
XX ADF17044;
XX 12-FEB-2004 (first entry)
XX Human albumin therapeutic fusion protein segID2170.
XX
XX albumin fusion protein; albumin activity; human serum albumin;
XX serum osmotic pressure; shelf-life; stability; antidiabetic;
XX gene therapy; diabetes mellitus; human.

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XX Chimeric.
OS Homo sapiens.
XX MO2003060071-A2.
XX 24-JUL-2003.
XX 23-DEC-2002; 2002W0-US040891.
XX 21-DEC-2001; 2001US-0341811P.
XX 24-JAN-2002; 2002US-0350358P.
XX 28-JAN-2002; 2002US-0351360P.
XX 26-FEB-2002; 2002US-0359370P.
XX 28-FEB-2002; 2002US-0360000P.
XX 27-MAR-2002; 2002US-0367500P.
XX 08-APR-2002; 2002US-0370237P.
XX 10-MAY-2002; 2002US-0378950P.
XX 24-MAY-2002; 2002US-0382617P.
XX 28-MAY-2002; 2002US-0383123P.
XX 05-JUN-2002; 2002US-0385708P.
XX 10-JUL-2002; 2002US-0394625P.
XX 24-JUL-2002; 2002US-0398008P.
XX 09-AUG-2002; 2002US-0402131P.
XX 13-AUG-2002; 2002US-0402708P.
XX 18-SEP-2002; 2002US-0411355P.
XX 18-SEP-2002; 2002US-0411426P.
XX 02-OCT-2002; 2002US-0414984P.
XX 11-OCT-2002; 2002US-0417611P.
XX 23-OCT-2002; 2002US-0420246P.
XX 05-NOV-2002; 2002US-0423623P.
XX (HUMA-) HUMAN GENOME SCI INC.
XX (BELZ) DELTA BIOTECHNOLOGY LTD.
XX (PRIN-) PRINCIPAL PHARM CORP.
XX
XX Ballance DJ, Turner AJ, Rosen CA, Haseltine WA;
XX WPI: 2003-598517/56.
XX
XX New albumin fusion protein, useful for preparing a composition for
XX treating diabetes mellitus.
XX
XX Example 4; SEQ ID NO 2170; 24pp; English.
XX
XX This invention relates to a novel albumin fusion protein having albumin
XX or biological activity. Human serum albumin is responsible for a
XX significant proportion of the osmotic pressure of serum and also
XX functions as a carrier of endogenous and exogenous ligands. The fusion of
XX albumin to a therapeutic protein may increase shelf-life and stability of
XX the therapeutic protein. The albumin fusion protein of the invention may
XX allow production of compositions with antidiabetic activity whilst the
XX nucleotide sequence which encodes it may be useful for gene therapy. The
XX albumin fusion protein is useful for preparing a composition for treating
XX diabetes mellitus. The present sequence is the amino acid sequence of a
XX novel full-length human albumin therapeutic fusion protein of the
XX invention. Note: The sequence data for this patent did not form part of
XX the printed specification, but was obtained in electronic format directly
XX from WIPO at ftp.wipo.int/pub/publ/ishedpct_sequences

RESULT 4
ADH22037
ID ADH22037 standard; protein; 673 AA.
XX AC ADH22037;
XX DT 11-MAR-2004 (first entry)
XX DE Mouse albumin/human GIP-1(7-36)(A8G) fusion protein, SEQ ID NO:834.
XX XX Fusion protein; human serum albumin; HSA; therapeutic protein;
XX XX shelf-life; in vitro biological activity; in vivo biological activity;
XX XX metabolic disorder; endocrine disorder; diabetes; type 1; type 2;
XX XX diabetes-related condition; hyperglycemia; neural disorder; neuropathy;
XX XX retinopathy; cardiovascular disorder; heart disease; renal disorder;
XX XX obesity; glucose level maintenance; weight loss; antidiabetic; cardiant;
XX XX anorectic; ophthalmological; gene therapy; mouse serum albumin.
XX OS Synthetic.
XX OS Chimeric.
XX OS Homo sapiens.
XX OS Mus sp.
XX MO2003059934-A2.
XX PD 24-JUL-2003.
XX XX
XX PE 23-DEC-2002; 2002W0-US040892.
XX
XX 21-DEC-2001; 2001US-0341811P.
XX 24-JAN-2002; 2002US-0350358P.
XX 26-FEB-2002; 2002US-0359370P.
XX 28-FEB-2002; 2002US-0360000P.
XX 27-MAR-2002; 2002US-0367500P.
XX 08-APR-2002; 2002US-0370237P.
XX 10-MAY-2002; 2002US-0378950P.
XX 24-JUL-2002; 2002US-0398008P.
XX 09-AUG-2002; 2002US-0402131P.
XX 13-AUG-2002; 2002US-0402708P.
XX 18-SEP-2002; 2002US-0411355P.
XX 02-OCT-2002; 2002US-0414984P.
XX 11-OCT-2002; 2002US-0417611P.
XX 23-OCT-2002; 2002US-0420246P.
XX 05-NOV-2002; 2002US-0423623P.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
XX PA
XX PA Rosen CA, Haseltine WA;
XX PI
XX PI WPI: 2003-598501/56.
XX
XX New albumin fusion protein, useful for preparing a composition for
XX treating diabetes mellitus.
XX
XX Disclosure; SEQ ID NO 834; 1086pp; English.
XX
XX The invention relates to fusion proteins comprising human serum albumin
XX (ADH21530) and a therapeutic polypeptide such as a therapeutic protein,
XX antibody or peptide or their variants or fragments. The therapeutic
XX protein may be fused to the N-terminus, the C-terminus or both termini of
XX albumin via a linker. The albumin component of the fusion proteins
XX prolongs the shelf-life and the in vitro and vivo biological activity of
XX the proteins compared with those of the corresponding therapeutic
XX proteins on their own. The invention also relates to nucleic acids
XX encoding albumin fusion proteins, vectors and host cells comprising an
XX albumin fusion protein nucleic acid, compositions and kits comprising an
XX albumin fusion protein. The method of extending the shelf-life of a
XX therapeutic protein by fusion with albumin, and the treatment of disease
XX using an albumin fusion protein. The albumin fusion protein may be used
XX in the treatment of metabolic/endocrine disorders, diabetes and diabetes-
XX related conditions. Specifically the albumin fusion proteins may be used

Query Match 100.0%; Score 465; DB 7; Length 673;
Best Local Similarity 100.0%; Pred. No. 1,4e-44;
Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 MNIVYVIFLISPOQGLHRTTRRSGLDKRRHGCGPTSDVSSYLRGQAQAKERFLAWLVKGRH 60
1 NNIFFIFLFLSPVQGLHRTTRRSGLDKRRHGCGPTSDVSSYLRGQAQAKERFLAWLVKGRH 60
1 MNIFIFLFLSPVQGLHRTTRRSGLDKRRHGCGPTSDVSSYLRGQAQAKERFLAWLVKGRH 60
Oy 61 GEGFTSDVSSYLRGQAQAKERFLAWLVKGR 89
61 GEGFTSDVSSYLRGQAQAKERFLAWLVKGR 89
Db 61 GEGFTSDVSSYLRGQAQAKERFLAWLVKGR 89

CC to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders
 CC (especially neuropathy), retinopathy, cardiovascular disorders
 CC (especially heart disease), renal disorder and obesity. The proteins may
 CC also be used in a method of maintaining a basal glucose level in a
 CC patient and in a method for losing weight. The present sequence is
 CC related to the invention.

XX Sequence 673 AA;

Query Match 100.0%; Score 465; DB 7; Length 673;
 Best Local Similarity 100.0%; Pred.No. 1.4e-44;
 Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNIFYFLFLSFVQGLBHTHRGSLDKRHGEGTFTSDVSSYLEGQAQAEFIAMLVKGRH 60
 1 MNIFYFLFLSFVQGLBHTHRGSLDKRHGEGTFTSDVSSYLEGQAQAEFIAMLVKGRH 60
 Db 1 MNIFYFLFLSFVQGLBHTHRGSLDKRHGEGTFTSDVSSYLEGQAQAEFIAMLVKGRH 60
 QY 61 GEGTFTSDVSSYLEGQAQAEFIAMLVKGR 89
 61 GEGTFTSDVSSYLEGQAQAEFIAMLVKGR 89
 Db 61 GEGTFTSDVSSYLEGQAQAEFIAMLVKGR 89

RESULT 5
 ID ADF16193 standard; protein; 674 AA.
 AD F16193;

AD F16193;

12-FEB-2004 (first entry)

Human albumin therapeutic fusion protein SegID1280.

albumin fusion protein; albumin activity; human serum albumin;
 serum osmotic pressure; shelf-life; stability; antidiabetic;
 gene therapy; diabetes mellitus; human.

Chimeric.
 Homo sapiens.

MO2003060071-A2.

24-JUL-2003.

23-DEC-2002; 2002WO-US040891.

21-DEC-2001; 2001US-0341811P.
 24-JAN-2002; 2002US-0350358P.
 28-JAN-2002; 2002US-0351360P.
 26-FEB-2002; 2002US-0359370P.
 28-FEB-2002; 2002US-0360000P.
 27-MAR-2002; 2002US-0367500P.
 08-APR-2002; 2002US-0370227P.
 10-MAY-2002; 2002US-0378950P.
 24-MAY-2002; 2002US-0382617P.
 28-MAY-2002; 2002US-0383123P.
 05-JUN-2002; 2002US-0385708P.
 10-JUL-2002; 2002US-0394625P.
 24-JUL-2002; 2002US-0398008P.
 09-AUG-2002; 2002US-0402131P.
 13-AUG-2002; 2002US-0402708P.
 18-SEP-2002; 2002US-0411355P.
 18-SEP-2002; 2002US-0411426P.
 02-OCT-2002; 2002US-0414984P.
 11-OCT-2002; 2002US-0417611P.
 23-OCT-2002; 2002US-0420246P.
 05-NOV-2002; 2002US-0423623P.
 (HUMA-) HUMAN GENOME SCI INC.
 (DELZ) DELTA BIOTECHNOLOGY LTD.
 (PRIN-) PRINCIPIA PHARM CORP.
 Ballance DJ, Turner AJ, Rosen CA, Haseltine WA;

DR WPI; 2003-598517/56.

XX New albumin fusion protein, useful for preparing a composition for
 PT treating diabetes mellitus.
 XX

PS Example 4; SEQ ID NO 1280; 24pp; English.

CC This invention relates to a novel albumin fusion protein having albumin
 CC or biological activity. Human serum albumin is responsible for a
 CC significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion of
 CC albumin to a therapeutic protein may increase shelf-life and stability of
 CC the therapeutic protein. The albumin fusion protein of the invention may
 CC allow production of compositions with antidiabetic activity whilst the
 CC nucleotide sequence which encodes it may be useful for gene therapy. The
 CC albumin fusion protein is useful for preparing a composition for treating
 CC diabetes mellitus. The present sequence is the amino acid sequence of a
 CC novel full-length human albumin therapeutic fusion protein of the
 CC invention. Note: The sequence data for this patent did not form part of
 CC the printed specification, but was obtained in electronic format directly
 CC from WIPO at ftp.wipo.int/pub/publshdepot_sequences

SO Sequence 674 AA;

Query Match 100.0%; Score 465; DB 7; Length 674;
 Best Local Similarity 100.0%; Pred.No. 1.4e-44;
 Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNIFYFLFLSFVQGLBHTHRGSLDKRHGEGTFTSDVSSYLEGQAQAEFIAMLVKGRH 60
 1 MNIFYFLFLSFVQGLBHTHRGSLDKRHGEGTFTSDVSSYLEGQAQAEFIAMLVKGRH 60
 Db 1 MNIFYFLFLSFVQGLBHTHRGSLDKRHGEGTFTSDVSSYLEGQAQAEFIAMLVKGRH 60
 QY 61 GEGTFTSDVSSYLEGQAQAEFIAMLVKGR 89
 61 GEGTFTSDVSSYLEGQAQAEFIAMLVKGR 89
 Db 61 GEGTFTSDVSSYLEGQAQAEFIAMLVKGR 89

ADH21650 standard; protein; 674 AA.
 ADH21650;

ADH21650;

11-MAR-2004 (first entry)

Human albumin/GLP-1(7-36(A8G))x2 fusion protein, SEQ ID NO:447.

Fusion protein; human serum albumin; HSA; therapeutic protein;
 shelf-life; in vitro biological activity; in vivo biological activity;
 metabolic disorder; endocrine disorder; diabetes; type 1; type 2;
 diabetes-related condition; hyperglycaemia; neural disorder; neuropathy;
 retinopathy; cardiovascular disorder; heart disease; renal disorder;
 obesity; glucose level maintenance; weight loss; antidiabetic; cardiac;
 anorectic; ophthalmological; gene therapy.

Synthetic.
 Chimeric.
 Homo sapiens.

MO2003059934-A2.

24-JUL-2003.

23-DEC-2002; 2002WO-US040892.

21-DEC-2001; 2001US-0341811P.
 24-JAN-2002; 2002US-0350358P.
 26-FEB-2002; 2002US-0359370P.
 27-MAR-2002; 2002US-0360000P.
 28-FEB-2002; 2002US-0367500P.
 08-APR-2002; 2002US-0370227P.
 10-MAY-2002; 2002US-0378950P.
 24-JUL-2002; 2002US-0398008P.

PR 09-AUG-2002; 2002US-0402131P.
 PR 13-AUG-2002; 2002US-0402708P.
 PR 18-SEP-2002; 2002US-0411355P.
 PR 02-OCT-2002; 2002US-0414984P.
 PR 11-OCT-2002; 2002US-0417611P.
 PR 23-OCT-2002; 2002US-0420246P.
 PR 05-NOV-2002; 2002US-0423623P.
 XX (HUMA-) HUMAN GENOME SCI INC.
 XX Rosen CA, Heselbine WA;
 XX WPI; 2003-598501/56.
 DR WPI; 2003-598501/56.
 XX New albumin fusion protein, useful for preparing a composition for
 PT treating diabetes mellitus.
 XX
 XX PS Disclosure; SEQ ID NO 447; 1086pp; English.
 XX
 CC The invention relates to fusion proteins comprising human serum albumin
 CC (ADH21530) and a therapeutic polypeptide such as a therapeutic protein,
 CC antibody or peptide or their variants or fragments. The therapeutic
 CC protein may be fused to the N-terminus, the C-terminus or both termini of
 CC albumin via a linker. The albumin component of the fusion proteins
 CC prolongs the shelf-life and the in vitro and vivo biological activity of
 CC the proteins compared with those of the corresponding therapeutic
 CC proteins on their own. The invention also relates to nucleic acids
 CC encoding albumin fusion proteins, vectors and host cells comprising an
 CC albumin fusion protein nucleic acid, compositions and kits comprising an
 CC albumin fusion protein, the method of extending the shelf-life of a
 CC therapeutic protein by fusion with albumin, and the treatment of disease
 CC using an albumin fusion protein. The albumin fusion proteins may be used
 CC in the treatment of metabolic/endocrine disorders, diabetes and diabetes-
 CC related conditions. Specifically the albumin fusion proteins may be used
 CC to treat type 1 and type 2 diabetes, hyperglycemia, neural disorders
 CC (especially neuropathy), retinopathy, cardiovascular disorders
 CC (especially heart disease, renal disorders and obesity. The proteins may
 CC also be used in a method of maintaining a basal glucose level in a
 CC patient and in a method of losing weight. The present sequence is
 CC related to the invention.
 CC
 XX Sequence 674 AA;
 SQ
 Query Match 100.0%; Score 465; DB 7; Length 674;
 Best Local Similarity 100.0%; Pred. No. 1.4e-44;
 Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

KM gastrointestinal disease; gene therapy; toxin; HSA; albumin;
 KM glucagon-like peptide 1; GLP1.
 XX
 OS Homo sapiens.
 OS Kluweromyces lactis.
 OS Chimeric.
 XX
 PN WO2005003296-A2.
 XX
 PD 13-JAN-2005.
 XX
 PF 20-JAN-2004; 2004WO-US001369.
 XX
 PR 22-JAN-2003; 2003US-0441305P.
 PR 11-MAR-2003; 2003US-0453201P.
 PR 02-MAY-2003; 2003US-0467222P.
 PR 23-MAY-2003; 2003US-0472816P.
 PR 06-JUN-2003; 2003US-0476267P.
 PR 24-SEP-2003; 2003US-0505172P.
 PR 30-SEP-2003; 2003US-0506746P.
 XX
 XX (HUMA-) HUMAN GENOME SCI INC.
 XX Rosen CA;
 XX Heselbine WA, Rosen CA;
 XX WPI; 2005-091786/10.
 DR WPI; 2005-091786/10.
 XX
 PT New albumin fusion protein for diagnosing, treating or preventing
 PT diseases such as HIV/AIDS, diabetes, obesity, heart disease or immune
 PT disorders comprises a therapeutic protein (e.g. CD4M33, GLP-2 or PACAP-
 PT 27) and an albumin.
 XX
 XX Example 13; SEQ ID NO 206; 884pp; English.
 PS
 CC The invention relates to a novel albumin fusion protein comprising a
 CC therapeutic protein as listed in the specification in Table 1 and an
 CC albumin comprising a sequence of SEQ ID NO: 1, or a fragment or variant
 CC of SEQ ID NO: 1, where the fragment or variant has albumin activity and
 CC where the albumin activity is the ability to prolong the shelf life of
 CC the therapeutic protein compared to the shelf-life of the therapeutic
 CC protein in an unbuffered state. Human serum albumin (HSA, HA) is responsible
 CC for a significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion
 CC protein of the invention demonstrates anti-HIV, gastrointestinal-gen.,
 CC antidiabetic, anorectic, cardiac and immunosuppressive activities. The
 CC fusion protein may be useful for diagnosing, treating, preventing or
 CC ameliorating diseases, such as immune disorders, blood disorders,
 CC hyperproliferative disorders, renal disorders, cardiovascular disorders,
 CC respiratory disorders, angiogenesis-related disorders, neurological
 CC disorders, wound healing disorders, endocrine disorders, reproductive
 CC disorders, infectious disorders and gastrointestinal disorders, possibly
 CC with the use of gene therapy techniques. The current sequence is that of
 CC the Kluweromyces lactis killer toxin-Glpi-human serum albumin fusion
 CC protein - SEQ 206 of the invention.
 CC
 XX Sequence 674 AA;
 SQ
 Query Match 100.0%; Score 465; DB 9; Length 674;
 Best Local Similarity 100.0%; Pred. No. 1.4e-44;
 Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX AC ADM45204;
 XX 07-APR-2005 (first entry)
 DE K. lactis killer toxin-GLP1-HSA-GFP tag fusion protein - SEQ ID 208.
 XX
 XX fusion protein; anti-HIV; gastrointestinal-gen.; antidiabetic; anorectic;
 KW nephrotoxic; cardiact; cytostatic; neuroprotective; immunosuppressive;
 KW immune disorder; hematological disease; hyperproliferative disorder;
 KW renal disease; cardiovascular disease; cardiovascular-gen.;
 KW respiratory disorder; angiogenesis disorder; neurological disease;
 KW wound healing; vulnery; endocrine disease; reproductive disorder;
 KW gynecological; infectious disease; antimicrobial;
 KW gastrointestinal disease; gene therapy; toxin; HSA; albumin;
 KW glucagon-like peptide 1; GLP1.
 XX
 XX Homo sapiens.
 OS Kluveromyces lactis.
 OS Chimeric.
 XX
 XX WO2005003296-A2.
 PD 13-JAN-2005.
 XX
 XX 20-JAN-2004; 2004MO-US001369.
 XX
 XX 22-JAN-2003; 2003US-0441105P.
 PR 11-MAR-2003; 2003US-0453201P.
 PR 02-MAY-2003; 2003US-0467222P.
 PR 23-MAY-2003; 2003US-0472816P.
 PR 06-JUN-2003; 2003US-0476267P.
 PR 24-SEP-2003; 2003US-0505172P.
 PR 30-SEP-2003; 2003US-0506746P.
 PA (HUMA-) HUMAN GENOME SCI INC.
 PA Haseltine WA, Rosen CA;
 PI WPI; 2005-091786/10.
 DR
 XX
 XX New albumin fusion protein for diagnosing, treating or preventing
 PT diseases such as HIV/AIDS, diabetes, obesity, heart disease or immune
 PT disorders comprises a therapeutic protein (e.g. CD4M33, GLP-2 or PACAP-
 PT 27) and an albumin.
 XX
 XX Example 13; SEQ ID NO 208; 884pp; English.
 XX
 XX The invention relates to a novel albumin fusion protein comprising a
 CC therapeutic protein as listed in the specification in Table 1 and an
 CC albumin comprising a sequence of SEQ ID NO: 1, or a fragment or variant
 CC of SEQ ID NO: 1, where the fragment or variant has albumin activity and
 CC where the albumin activity is the ability to prolong the shelf life of
 CC the therapeutic protein compared to the shelf-life of the therapeutic
 CC protein in an unfused state. Human serum albumin (HSA, HA) is responsible
 CC for a significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion
 CC protein of the invention demonstrates anti-HIV, gastrointestinal-gen.,
 CC antidiabetic, anorectic, cardiact and immunosuppressive activities. The
 CC fusion protein may be useful for diagnosing, treating, preventing or
 CC ameliorating diseases, such as immune disorders, blood disorders,
 CC hyperproliferative disorders, renal disorders, cardiovascular disorders,
 CC respiratory disorders, angiogenesis-related disorders, neurological
 CC disorders, wound healing disorders, endocrine disorders, reproductive
 CC disorders, infectious disorders and gastrointestinal disorders, possibly
 CC with the use of gene therapy techniques. The current sequence is that of
 CC the Kluveromyces lactis killer toxin-GLP1-HSA-GFP tag fusion protein -
 CC SEQ ID 208 of the invention.
 XX
 XX Sequence 915 AA;
 Query Match 100.0%; Score 465; DB 9; Length 915;
 Best Local Similarity 100.0%; Pred. No. 2e-44;

Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MNIFYIFLFLSPVQGLHHTHRGSLDKRHGGGTFTSDVSSYLEGQAKEFLAMLVKGRH 60
 |||
 Db 1 MNIFYIFLFLSPVQGLHHTHRGSLDKRHGGGTFTSDVSSYLEGQAKEFLAMLVKGRH 60
 QY 61 GGSTFTSDVSSYLEGQAKEFLAMLVKGR 89
 |||
 Db 61 GGSTFTSDVSSYLEGQAKEFLAMLVKGR 89
 RESULT 9
 ADF16144
 ID ADF16144 standard; protein; 669 AA.
 XX
 AC ADF16144;
 XX
 DT 12-FEB-2004 (first entry)
 XX
 DE Human albumin therapeutic fusion protein SeqID1231.
 XX
 XX albumin fusion protein; albumin activity; human serum albumin;
 KW serum osmotic pressure; shelf-life; stability; antidiabetic;
 KW gene therapy; diabetes mellitus; human.
 XX
 XX Chimeric.
 OS Homo sapiens.
 OS
 PN WO2003060071-A2.
 XX
 PD 24-JUL-2003.
 XX
 XX 23-DEC-2002; 2002MO-US040891.
 PF
 XX
 XX 21-DEC-2001; 2001US-0341811P.
 PR 24-JAN-2002; 2002US-0350358P.
 PR 28-JAN-2002; 2002US-0351360P.
 PR 26-FEB-2002; 2002US-0359370P.
 PR 28-FEB-2002; 2002US-0360000P.
 PR 27-MAR-2002; 2002US-0367500P.
 PR 08-APR-2002; 2002US-0370227P.
 PR 10-MAY-2002; 2002US-0378950P.
 PR 24-MAY-2002; 2002US-0382617P.
 PR 28-MAY-2002; 2002US-0383123P.
 PR 05-JUN-2002; 2002US-0385708P.
 PR 10-JUL-2002; 2002US-0394625P.
 PR 24-JUL-2002; 2002US-0398008P.
 PR 09-AUG-2002; 2002US-0402131P.
 PR 13-AUG-2002; 2002US-0402708P.
 PR 18-SEP-2002; 2002US-0411355P.
 PR 18-SEP-2002; 2002US-0411426P.
 PR 02-OCT-2002; 2002US-0414984P.
 PR 11-OCT-2002; 2002US-0417611P.
 PR 23-OCT-2002; 2002US-0420246P.
 PR 05-NOV-2002; 2002US-0423623P.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 PA (DELZ) DELTA BIOTECHNOLOGY LTD.
 PA (PRIN-) PRINCIPAL PHARM CORP.
 PA
 PI Ballance DJ, Turner AJ, Rosen CA, Haseltine WA;
 DR WPI; 2003-598517/56.
 XX
 XX New albumin fusion protein, useful for preparing a composition for
 PT treating diabetes mellitus.
 PT
 XX Example 4; SEQ ID NO 1231; 24pp; English.
 PS
 XX
 XX This invention relates to a novel albumin fusion protein having albumin
 CC or biological activity. Human serum albumin is responsible for a
 CC significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion of

CC albumin to a therapeutic protein may increase shelf-life and stability of
CC the therapeutic protein. The albumin fusion protein of the invention may
CC allow production of compositions with antidiabetic activity whilst the
CC nucleotide sequence which encodes it may be useful for gene therapy. The
CC albumin fusion protein is useful for preparing a composition for treating
CC diabetes mellitus. The present sequence is the amino acid sequence of a
CC novel full-length human albumin therapeutic fusion protein of the
CC invention. Note: the sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/publisthedqct_sequences
XX
SQ Sequence 669 AA;

Query Match 73.4%; Score 341.5; DB 7; Length 669;
Best Local Similarity 79.3%; Pred. No. 2.2e-30;
Matches 69; Conservative 4; Mismatches 5; Indels 9; Gaps 1;

DY 3 IPYIFLFLSFVQGLBHTHRSGSIDKRRHGEGTFTSDVSSYLEGQAQAKETLAWLVKGRHG 62
||| : : : : :
Dd 7 ISLLFLPSSAYSF-----SLDKRHGEGTFTSDVSSYLEGQAQAKETLAWLVKGRHG 57
QY 63 GTFTSDVSSYLEGQAQAKETLAWLVKGR 89
||| : : : : :
Dd 58 GTFTSDVSSYLEGQAQAKETLAWLVKGR 84

RESULT 10
ADH21622
ID ADH21622 standard; protein; 669 AA.
XX
AC ADH21622;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human albumin/GHP-1(7-36(A8G)) fusion protein, SEQ ID NO:419.

XX Fusion protein; human serum albumin; HSA; therapeutic protein;
KW shelf-life; in vitro biological activity; in vivo biological activity;
KW metabolic disorder; endocrine disorder; diabetes; type 1; type 2;
KW diabetes-related condition; hyperglycaemia; neural disorder; neuropathy;
KW reitropathy; cardiovascular disorder; heart disease; renal disorder;
KW obesity; glucose level maintenance; weight loss; antidiabetic; cardiant;
KW anorectic; ophthalmological; gene therapy.

OS Synthetic.
OS Chimeric.
OS Homo sapiens.
XX
XX WO2003059934-A2.
XX
PD 24-JUL-2003.
XX
PF 23-DEC-2002; 2002WO-US040892.
XX
PR 21-DEC-2001; 2001US-0341811P.
PR 24-JAN-2002; 2002US-0350358P.
PR 26-FEB-2002; 2002US-0359370P.
PR 28-FEB-2002; 2002US-0360000P.
PR 27-MAR-2002; 2002US-0367500P.
PR 08-APR-2002; 2002US-0370227P.
PR 10-MAY-2002; 2002US-0378950P.
PR 24-JUL-2002; 2002US-0398008P.
PR 09-AUG-2002; 2002US-0402131P.
PR 13-AUG-2002; 2002US-0402708P.
PR 18-SEP-2002; 2002US-0411355P.
PR 02-OCT-2002; 2002US-0414984P.
PR 11-OCT-2002; 2002US-0417611P.
PR 23-OCT-2002; 2002US-0420246P.
PR 05-NOV-2002; 2002US-0423623P.
XX
XX (HDMA-) HUMAN GENOME SCI INC.
XX
XX Rozen CA, Haseeltine WA.

XX WPI; 2003-598501/56.
DR
XX
PT New albumin fusion protein, useful for preparing a composition for
PT treating diabetes mellitus.
PS
PS Disclosures; SEQ ID NO 419; 1086pp; English.

CC The invention relates to fusion proteins comprising human serum albumin
CC (ADH21530) and a therapeutic polypeptide such as a therapeutic protein,
CC antibody or peptide or their variants or fragments. The therapeutic
CC protein may be fused to the N-terminus, the C-terminus or both termini of
CC albumin via a linker. The albumin component of the fusion proteins
CC prolongs the shelf-life and the in vitro and vivo biological activity of
CC the proteins compared with those of the corresponding therapeutic
CC proteins on their own. The invention also relates to nucleic acids
CC encoding albumin fusion proteins, vectors and host cells comprising an
CC albumin fusion protein nucleic acid, compositions and kits comprising an
CC albumin fusion protein. The method of extending the shelf-life of a
CC therapeutic protein by fusion with albumin, and the treatment of disease
CC using an albumin fusion protein. The albumin fusion proteins may be used
CC in the treatment of metabolic/endocrine disorders, diabetes and diabetes-
CC related conditions. Specifically the albumin fusion proteins may be used
CC to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders
CC (especially neuropathy), reitropathy, cardiovascular disorders
CC (especially heart disease, renal disorders and obesity). The proteins may
CC also be used in a method of maintaining a basal glucose level in a
CC patient and in a method for losing weight. The present sequence is
CC related to the invention.

Query Match 73.4%; Score 341.5; DB 7; Length 669;
Best Local Similarity 79.3%; Pred. No. 2.2e-30;
Matches 69; Conservative 4; Mismatches 5; Indels 9; Gaps 1;

DY 3 IPYIFLFLSFVQGLBHTHRSGSIDKRRHGEGTFTSDVSSYLEGQAQAKETLAWLVKGRHG 62
||| : : : : :
Dd 7 ISLLFLPSSAYSF-----SLDKRHGEGTFTSDVSSYLEGQAQAKETLAWLVKGRHG 57
QY 63 GTFTSDVSSYLEGQAQAKETLAWLVKGR 89
||| : : : : :
Dd 58 GTFTSDVSSYLEGQAQAKETLAWLVKGR 84

RESULT 11
ADP16688
ID ADP16688 standard; protein; 145 AA.
XX
AC ADP16688;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human albumin fusion protein-related protein SeqID1790.
XX
KW albumin fusion protein; albumin activity; human serum albumin;
KW serum osmotic pressure; shelf-life; stability; antidiabetic;
KW gene therapy; diabetes mellitus; human; gene; ds.
OS Homo sapiens.
XX
XX WO2003060071-A2.
XX
PD 24-JUL-2003.
XX
PF 23-DEC-2002; 2002WO-US040891.
XX
PR 21-DEC-2001; 2001US-0341811P.
PR 24-JAN-2002; 2002US-0350358P.
PR 28-JAN-2002; 2002US-0351360P.
PR 26-FEB-2002; 2002US-0359370P.
PR 28-FEB-2002; 2002US-0360000P.
PR 27-MAR-2002; 2002US-0367500P.

PR 08-APR-2002; 2002US-0370227P.
 PR 10-MAY-2002; 2002US-0378950P.
 PR 24-MAY-2002; 2002US-0382617P.
 PR 28-MAY-2002; 2002US-0383123P.
 PR 05-JUN-2002; 2002US-0385708P.
 PR 10-JUL-2002; 2002US-0394625P.
 PR 24-JUL-2002; 2002US-0398008P.
 PR 09-AUG-2002; 2002US-0402131P.
 PR 13-AUG-2002; 2002US-0402708P.
 PR 18-SEP-2002; 2002US-0411355P.
 PR 18-SEP-2002; 2002US-0411426P.
 PR 02-OCT-2002; 2002US-0414984P.
 PR 11-OCT-2002; 2002US-0417611P.
 PR 23-OCT-2002; 2002US-0420246P.
 PR 05-NOV-2002; 2002US-0423633P.
 XX (HUMA-) HUMAN GENOME SCI INC.
 PA (DELZ) DELTA BIOTECHNOLOGY LTD.
 PA (PRIN-) PRINCIPIA PHARM CORP.
 XX
 PI Ballance DJ, Turner AJ, Rosen CA, Haseltine WA;
 DR WPI; 2003-598517/56.
 DR N-PSDB; ADF16362.
 XX
 PT New albumin fusion protein, useful for preparing a composition for
 PT treating diabetes mellitus.
 XX
 PS Example 4; SEQ ID NO 1790; 24pp; English.
 XX
 PA This invention relates to a novel albumin fusion protein having albumin
 PI or biological activity. Human serum albumin is responsible for a
 PI significant proportion of the osmotic pressure of serum and also
 CC functions as a carrier of endogenous and exogenous ligands. The fusion of
 CC albumin to a therapeutic protein may increase shelf-life and stability of
 CC the therapeutic protein. The albumin fusion protein of the invention may
 CC allow production of compositions with antidiabetic activity whilst the
 CC nucleotide sequence which encodes it may be useful for gene therapy. The
 CC albumin fusion protein is useful for preparing a composition for treating
 CC diabetes mellitus. The present sequence is that of a therapeutic protein
 CC which was fused with human albumin to create a novel albumin fusion
 CC protein of the invention. Note: The sequence data for this patent did not
 CC form part of the printed specification, but was obtained in electronic
 CC format directly from WIPO at ftp.wipo.int/pub/publ/ishedpct_sequences
 CC
 XX Sequence 145 AA:
 SQ

KW diabetes-related condition; hyperglycaemia; neural disorder; neuropathy;
 KW retinopathy; cardiovascular disorder; heart disease; renal disorder;
 KW obesity; glucose level maintenance; weight loss; antidiabetic; cardiac;
 KW anorectic; ophthalmological; gene therapy; mutant; mutein.
 OS Synthetic.
 OS Homo sapiens.
 XX
 XX MO2003059934-A2.
 XX
 XX 24-JUL-2003.
 XX
 XX 23-DEC-2002; 2002WO-US040892.
 XX
 XX 21-DEC-2001; 2001US-0344811P.
 XX 24-JAN-2002; 2002US-0350358P.
 XX 26-FEB-2002; 2002US-0359370P.
 XX 28-FEB-2002; 2002US-0360000P.
 XX 27-MAR-2002; 2002US-0367500P.
 XX 08-APR-2002; 2002US-0370227P.
 XX 10-MAY-2002; 2002US-0378950P.
 XX 24-JUL-2002; 2002US-0398008P.
 XX 09-AUG-2002; 2002US-0402131P.
 XX 13-AUG-2002; 2002US-0402708P.
 XX 18-SEP-2002; 2002US-0411355P.
 XX 02-OCT-2002; 2002US-0414984P.
 XX 11-OCT-2002; 2002US-0417611P.
 XX 23-OCT-2002; 2002US-0420246P.
 XX 05-NOV-2002; 2002US-0423633P.
 XX
 XX (HUMA-) HUMAN GENOME SCI INC.
 PA Rosen CA, Haseltine WA;
 PI
 PI WPI; 2003-598501/56.
 DR N-PSDB; ADH21776.
 XX
 PT New albumin fusion protein, useful for preparing a composition for
 PT treating diabetes mellitus.
 XX
 PS Disclosure; SEQ ID NO 685; 1086pp; English.
 XX
 XX The invention relates to fusion proteins comprising human serum albumin
 CC (ADH21530) and a therapeutic polypeptide such as a therapeutic protein,
 CC antibody or peptide or their variants or fragments. The therapeutic
 CC protein may be fused to the N-terminus, the C-terminus or both termini of
 CC albumin via a linker. The albumin component of the fusion proteins
 CC prolongs the shelf-life and the in vitro and vivo biological activity of
 CC the proteins compared with those of the corresponding therapeutic
 CC proteins on their own. The invention also relates to nucleic acids
 CC encoding albumin fusion proteins, vectors and host cells comprising an
 CC albumin fusion protein nucleic acid, compositions and kits comprising an
 CC albumin fusion protein, the method of extending the shelf-life of a
 CC therapeutic protein by fusion with albumin, and the treatment of disease
 CC using an albumin fusion protein. The albumin fusion proteins may be used
 CC in the treatment of metabolic/endocrine disorders, diabetes and diabetes-
 CC related conditions. Specifically the albumin fusion proteins may be used
 CC to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders
 CC (especially neuropathy), retinopathy, cardiovascular disorders
 CC (especially heart disease, renal disorders and obesity. The proteins may
 CC also be used in a method of maintaining a basal glucose level in a
 CC patient and in a method for losing weight. The present sequence is
 CC related to the invention.
 CC
 XX Sequence 145 AA:
 SQ

Query Match 73.3%; Score 341; DB 7; Length 145;
 Best Local Similarity 81.7%; Pred. No. 4.3e-31;
 Matches 67; Conservative 4; Mismatches 11; Indels 0; Gaps 0;

RESULT 12
 ADH21888
 ID ADH21888 standard; protein: 145 AA.
 XX
 AC ADH21888;
 XX
 DT 11-MAR-2004 (first entry)
 XX
 DE Human GLP-1(7-36(AAG)), SEQ ID NO:685.
 XX
 KW Fusion protein; human serum albumin; HSA; therapeutic protein;
 KW shelf-life; in vitro biological activity; in vivo biological activity;
 KW metabolic disorder; endocrine disorder; diabetes; type 1; type 2;

Query Match 73.3%; Score 341; DB 7; Length 145;
 Best Local Similarity 81.7%; Pred. No. 4.3e-31;
 Matches 67; Conservative 4; Mismatches 11; Indels 0; Gaps 0;

Query Match 73.3%; Score 341; DB 7; Length 145;
 Best Local Similarity 81.7%; Pred. No. 4.3e-31;
 Matches 67; Conservative 4; Mismatches 11; Indels 0; Gaps 0;

Query Match 73.3%; Score 341; DB 7; Length 145;
 Best Local Similarity 81.7%; Pred. No. 4.3e-31;
 Matches 67; Conservative 4; Mismatches 11; Indels 0; Gaps 0;

Qy 68 DVSSYLEGQAAKEFIAMLVKGR 89
DB 124 DVSSYLEGQAAKEFIAMLVKGR 145

RESULT 13
ADP16525
ID ADP16525 standard; protein; 730 AA.
XX ADF16525;

XX 12-FEB-2004 (first entry)

DE Human albumin therapeutic fusion protein SegID1622.

XX albumin fusion protein; albumin activity; human serum albumin;
KW serum osmotic pressure; shelf-life; stability; antidiabetic;
KW gene therapy; diabetes mellitus; human.

OS Chimeric.
OS Homo sapiens.

XX MO2003060071-A2.

XX 24-JUL-2003.

XX 23-DEC-2002; 2002MO-US040891.

XX 21-DEC-2001; 2001US-0341811P.

XX 24-JAN-2002; 2002US-0350358P.

XX 26-FEB-2002; 2002US-0351360P.

XX 28-FEB-2002; 2002US-0359370P.

XX 27-MAR-2002; 2002US-0360000P.

XX 08-APR-2002; 2002US-0370227P.

XX 10-MAY-2002; 2002US-0378950P.

XX 24-MAY-2002; 2002US-0382617P.

XX 28-MAY-2002; 2002US-0383123P.

XX 05-JUN-2002; 2002US-0385708P.

XX 10-JUL-2002; 2002US-0394625P.

XX 24-JUL-2002; 2002US-0398008P.

XX 09-AUG-2002; 2002US-0402131P.

XX 13-AUG-2002; 2002US-0402708P.

XX 18-SEP-2002; 2002US-0411355P.

XX 18-SEP-2002; 2002US-0414984P.

XX 11-OCT-2002; 2002US-0417611P.

XX 23-OCT-2002; 2002US-0420246P.

XX 05-NOV-2002; 2002US-0423623P.

XX (HUMA-) HUMAN GENOME SCI INC.
PA (DELZ) DELTA BIOTECHNOLOGY LTD.
PA (PRIN-) PRINCIPIA PHARM CORP.

PI Ballance DJ, Turner AJ, Rosen CA, Haseltine WA;
XX WPI; 2003-598517/56.

PT New albumin fusion protein, useful for preparing a composition for
XX treating diabetes mellitus.

PS Example 4; SEQ ID NO 1622; 24pp; English.
XX
CC This invention relates to a novel albumin fusion protein having albumin
CC or biological activity. Human serum albumin is responsible for a
CC significant proportion of the osmotic pressure of serum and also
CC functions as a carrier of endogenous and exogenous ligands. The fusion of
CC albumin to a therapeutic protein may increase shelf-life and stability of
CC the therapeutic protein. The albumin fusion protein of the invention may
CC allow production of compositions with antidiabetic activity whilst the
CC nucleotide sequence which encodes it may be useful for gene therapy. The
CC albumin fusion protein is useful for preparing a composition for treating

CC diabetes mellitus. The present sequence is the amino acid sequence of a
CC novel full-length human albumin therapeutic fusion protein of the
CC invention. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/publisthepc_sequences
XX
SQ Sequence 730 AA;

Query Match 73.3%; Score 341; DB 7; Length 730;
Best Local Similarity 81.7%; Pred. No. 2.8e-30;
Matches 67; Conservative 4; Mismatches 11; Indels 0; Gaps 0;

Qy 8 LFLISFYOGIEHTRRRGSIDPKRHGEGFTFSDVSSYLEGQAAKEFIAMLVKGRHGEFTFS 67
DB 64 LFINITITASTIAAKEBEGSIDPKRHGEGFTFSDVSSYLEGQAAKEFIAMLVKGRHGEFTFS 123

Qy 68 DVSSYLEGQAAKEFIAMLVKGR 89
DB 124 DVSSYLEGQAAKEFIAMLVKGR 145

RESULT 14
ADH21813
ID ADH21813 standard; protein; 730 AA.
XX ADH21813;

XX 11-MAR-2004 (first entry)

XX Human albumin/GMP-1(7-36(A8G)) fusion protein, SEQ ID NO:610.

XX Fusion protein; human serum albumin; HSA; therapeutic protein;
KW shelf-life; in vitro biological activity; in vivo biological activity;
KW metabolic disorder; endocrine disorder; diabetes; type 1; type 2;
KW diabetes-related condition; hyperglycaemia; neural disorder; neuropathy;
KW retinopathy; cardiovascular disorder; heart disease; renal disorder;
KW obesity; glucose level maintenance; weight loss; antidiabetic; cardiac;
KW anorectic; ophthalmological; gene therapy.

XX Synthetic.
OS OS Chimeric.
OS OS Homo sapiens.

XX MO2003059934-A2.

XX 24-JUL-2003.

XX 23-DEC-2002; 2002MO-US040892.

XX 21-DEC-2001; 2001US-0341811P.

XX 24-JAN-2002; 2002US-0350358P.

XX 26-FEB-2002; 2002US-0359370P.

XX 27-MAR-2002; 2002US-0360000P.

XX 08-APR-2002; 2002US-0370227P.

XX 10-MAY-2002; 2002US-0378950P.

XX 24-MAY-2002; 2002US-0382617P.

XX 28-MAY-2002; 2002US-0383123P.

XX 09-AUG-2002; 2002US-0402131P.

XX 13-AUG-2002; 2002US-0402708P.

XX 18-SEP-2002; 2002US-0411355P.

XX 18-SEP-2002; 2002US-0414984P.

XX 11-OCT-2002; 2002US-0417611P.

XX 23-OCT-2002; 2002US-0420246P.

XX 05-NOV-2002; 2002US-0423623P.

XX (HUMA-) HUMAN GENOME SCI INC.
PA Rosen CA, Haseltine WA;
XX WPI; 2003-598501/56.

PT New albumin fusion protein, useful for preparing a composition for
XX treating diabetes mellitus.

PT

```

XX XX
PS Disclosure; SEQ ID NO 610; 1086pp; English.
XX
CC The invention relates to fusion proteins comprising human serum albumin
CC (ADH21530) and a therapeutic polypeptide such as a therapeutic protein,
CC antibody or peptide or their variants or fragments. The therapeutic
CC protein may be fused to the N-terminus, the C-terminus or both termini of
CC albumin via a linker. The albumin component of the fusion proteins
CC prolongs the shelf-life and the in vitro and vivo biological activity of
CC the proteins compared with those of the corresponding therapeutic
CC proteins on their own. The invention also relates to nucleic acids
CC encoding albumin fusion proteins, vectors and host cells comprising an
CC albumin fusion protein nucleic acid, compositions and kits comprising an
CC albumin fusion protein, the method of extending the shelf-life of a
CC therapeutic protein by fusion with albumin, and the treatment of disease
CC using an albumin fusion protein. The albumin fusion proteins may be used
CC in the treatment of metabolic/endocrine disorders, diabetes and diabetes-
CC related conditions. Specifically the albumin fusion proteins may be used
CC to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders
CC (especially neuropathy), retinopathy, cardiovascular disorders
CC (especially heart disease, renal disorders and obesity. The proteins may
CC also be used in a method of maintaining a basal glucose level in a
CC patient and in a method for losing weight. The present sequence is
CC related to the invention.
XX
SQ Sequence 730 AA;
XX
Query Match 73.3%; Score 341; DB 7; Length 730;
Best Local Similarity 81.7%; Pred. No. 2.8e-30;
Matches 67; Conservative 4; Mismatches 11; Indels 0; Gaps 0;
QY 8 LPFLSPVQGLEHTRRSGSLDKRKHGEGFTTSDVSSYLEGQAAKEFIAWLVKGRHGEFTTS 67
| : : : : :
Db 64 LPIINTTASTIAAKEEGVSLDKRKHGEGFTTSDVSSYLEGQAAKEFIAWLVKGRHGEFTTS 123
| : : : : :
QY 68 DVSSYLEGQAAKEFIAWLVKGR 89
| : : : : :
Db 124 DVSSYLEGQAAKEFIAWLVKGR 145
| : : : : :
RESULT 15
ADP16150
ID ADP16150 standard; protein; 669 AA.
XX AC
XX ADF16150;
DT 12-FEB-2004 (first entry)
DE Human albumin therapeutic fusion protein SegID1237.
XX
XX albumin fusion protein; albumin activity; human serum albumin;
KW serum osmotic pressure; shelf-life; stability; antidiabetic;
KW gene therapy; diabetes mellitus; human.
OS Chimeric.
OS Homo sapiens.
XX
XX WC02003060071-AA2.
PN
XX
XX 24-JUL-2003.
PD
XX
XX 23-DEC-2002; 2002MO-US040891.
PF
XX
PR 21-DEC-2001; 2001US-0341811P.
PR 24-JAN-2002; 2002US-0350358P.
PR 28-JAN-2002; 2002US-0351360P.
PR 26-FEB-2002; 2002US-0359370P.
PR 28-FEB-2002; 2002US-0360000P.
PR 27-MAR-2002; 2002US-0367500P.
PR 08-APR-2002; 2002US-0370227P.
PR 10-MAY-2002; 2002US-0378950P.
PR 24-MAY-2002; 2002US-0382617P.
PR 28-MAY-2002; 2002US-0383123P.

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PR 05-JUN-2002; 2002US-0385708P.
PR 10-JUL-2002; 2002US-0394625P.
PR 24-JUL-2002; 2002US-0398080P.
PR 09-AUG-2002; 2002US-0402131P.
PR 13-AUG-2002; 2002US-0402708P.
PR 18-SEP-2002; 2002US-0411355P.
PR 18-SEP-2002; 2002US-0411826P.
PR 02-OCT-2002; 2002US-0414984P.
PR 11-OCT-2002; 2002US-0417611P.
PR 23-OCT-2002; 2002US-0420246P.
PR 05-NOV-2002; 2002US-0423623P.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
PA (DELTA) DELTA BIOTECHNOLOGY LTD.
PA (PRIN-) PRINCLIPIA PHARM CORP.
XX
XX Ballance DJ, Turner AJ, Rosen CA, Haseltine WA;
XX WPI; 2003-598517/56.
XX
XX New albumin fusion protein, useful for preparing a composition for
XX treating diabetes mellitus.
PT
PT Example 4; SEQ ID NO 1237; 24pp; English.
PS
PS This invention relates to a novel albumin fusion protein having albumin
XX or biological activity. Human serum albumin is responsible for a
XX significant proportion of the osmotic pressure of serum and also
XX functions as a carrier of endogenous and exogenous ligands. The fusion of
XX albumin to a therapeutic protein may increase shelf-life and stability of
XX the therapeutic protein. The albumin fusion protein of the invention may
XX allow production of compositions with antidiabetic activity whilst the
XX nucleotide sequence which encodes it may be useful for gene therapy. The
XX albumin fusion protein is useful for preparing a composition for treating
XX diabetes mellitus. The present sequence is the amino acid sequence of a
XX novel full-length human albumin therapeutic fusion protein of the
XX invention. Note: The sequence data for this patent did not form part of
XX the printed specification, but was obtained in electronic format directly
XX from WIPO at ftp.wipo.int/pub/publishedpct_sequences
XX
XX Sequence 669 AA;
XX
Query Match 72.2%; Score 335.5; DB 7; Length 669;
Best Local Similarity 78.2%; Pred. No. 1.1e-29;
Matches 68; Conservative 4; Mismatches 6; Indels 9; Gaps 1;
QY 3 IPYIFLSPVQGLEHTRRSGSLDKRKHGEGFTTSDVSSYLEGQAAKEFIAWLVKGRHGE 62
| : : : : :
Db 7 ISLIFLSPVAISR-----SLDKRKHGEGFTTSDVSSYLEGQAAKEFIAWLVKGRHGE 57
| : : : : :
QY 63 GFTTSDVSSYLEGQAAKEFIAWLVKGR 89
| : : : : :
Db 58 GFTTSDVSSYLEGQAAKEFIAWLVKGR 84
| : : : : :

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Search completed: April 19, 2006, 12:02:33
 Job time : 21.1122 secs

GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 19, 2006, 12:02:52 ; Search time 4.04545 Seconds
(Without alignments)
2116.769 Million cell updates/sec

Title: US-10-775-180-449
Perfect score: 465
Sequence: 1 MNIFPIPLFLPLSLSPVQGLHRT.....SSYLEGQAARKEPIAWLVKGR 89

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues
Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR 80.*
1: PIR1.*
2: PIR2.*
3: PIR3.*
4: PIR4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	247.5	53.2	180	1	GCBO
2	243.5	52.4	180	2	GCHU
3	243.5	52.4	180	2	A57294
4	241.5	51.9	180	1	GCHY
5	241.5	51.9	180	1	GCRT
6	240.5	51.7	180	1	GGCP
7	238.5	51.3	158	1	GGPG
8	230.5	49.6	180	1	GCRTTU
9	235.5	48.5	151	1	GCCH
10	225.5	48.5	206	2	I51301
11	208.5	44.8	178	2	I51058
12	206	44.3	101	1	GGFB
13	200.5	43.1	122	1	GCAR2
14	200.5	43.1	178	2	I51057
15	189.5	40.5	63	1	GCIDC
16	183	39.4	124	1	GCAP
17	182	39.1	72	1	GGXA
18	179.5	38.6	87	1	GGFIS
19	178.5	38.4	60	1	GGONC
20	155	33.3	66	2	I51093
21	142	30.5	1146	2	S07915
22	122	26.2	30	2	GG1125
23	122	26.2	30	2	GG1125
24	107	23.0	30	2	S44473
25	106	22.8	69	2	GGDG69
26	96	20.6	29	2	S07211
27	95	20.4	31	2	S44472
28	95	20.4	39	1	HMGH4G
29	94	20.2	29	1	GCDF

ALIGNMENTS

Query Match	Score	Pred. No.	Length	ID	Description
30	93	20.0	31	2	S44471
31	92	19.8	29	1	GCEN
32	89	19.1	29	1	GCOV
33	89	19.1	29	2	A91740
34	89	19.1	29	2	C39258
35	89	19.1	29	2	A91742
36	89	19.1	29	2	A91741
37	87	18.7	29	1	A61583
38	87	18.7	29	1	GCDC
39	87	18.7	29	1	GCRTS
40	87	18.7	29	2	CG0840
41	86.5	18.6	290	2	S52860
42	86	18.5	29	1	GCGB
43	86	18.5	39	1	HMGH3Z
44	85	18.3	29	1	GCPLF
45	85	18.3	29	2	A61135

RESULT 1

GCBO
glucagon precursor - bovine
N:Contains: gli-centin-related peptide; glucagon; glucagon-like peptide 1; glucagon-like
C:Species: Bos primigenius taurus (cattle)
C>Date: 14-Nov-1983 #sequence revision 14-Nov-1983 #text_change 20-Mar-1998
C/Accession: A93970; A92081; A01538
R:Lopez, L.C.; Frazier, M.L.; Su, C.J.; Kumar, A.; Saunders, G.F.
Proc. Natl. Acad. Sci. U.S.A. 80, 5485-5489, 1983
A>Title: Mammalian pancreatic preproglucagon contains three glucagon-related peptides.
A:Reference number: A93970; PMID:8329996; PMID:6577439
A:Accession: A93970
A:Molecule type: mRNA
A:Residues: 1-180 <LDP>
A:Cross-references: UNIPARC:UPI00001734FF; EMBL:K00107
R:Bromer, W.W.; Boucher, M.E.; Koffenberger Jr., J.E.
J. Biol. Chem. 246, 2822-2827, 1971
A>Title: Amino acid sequence of bovine glucagon.
A:Reference number: A92081; PMID:71166445; PMID:5102927
A:Accession: A92081
A:Molecule type: protein
A:Residues: 53-81 <BRO>
A:Cross-references: UNIPARC:UPI000002C586
C:Superfamily: glucagon
C:Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; pancr
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-180/Product: proglucagon #status predicted <PGC>
F:21-50/Region: gli-centin-related peptide #status predicted
F:53-81/Product: glucagon #status experimental <GCN>
F:98-127/Product: glucagon-like peptide 1 #status experimental <GL1>
F:146-178/Product: glucagon-like peptide 2 #status predicted <GL2>
F:117/Modified site: amidated carboxyl end (Arg) (amide in mature form from following 9

Query Match 53.2%; Score 247.5; DB 1; Length 180;
Best local similarity 42.4%; Pred. No. 3e-18;
Matches 53; Conservative 16; Mismatches 19; Indels 37; Gaps 3;

Qy 2 NIPIYIPLFLPLSLSPVQGLHRT.....SSYLEGQAARKEPIAWLVKGR 84
Db 3 SIYFVAGLFWMLVQGSWQRSLQNTBERKSSFPAPQRTDPLGDDPDQINEDKHSQGTFTSDY 62

Qy 40 SSYLEGQAARKEPIAWLVK-----GRGEGFTSDVSSYLEGQAARKEPIAW 84
Db 63 SKIYDSRRADPFVQWIMNTRKRNQNTAKRHDFEERLAEVGFSTDSVSSYLEGQAARKEPIAW 122

Qy 85 LVKGR 89
Db 123 LVKGR 127

RESULT 2
GCHU

F:21-180/Product: proglucaagon #status predicted <PGC>
F:21-50/Region: glicentin-related peptide #status predicted
F:53-81/Product: glucagon #status predicted <GCN>
F:98-127/Product: glucagon-like peptide 1 #status predicted <GL1>
F:146-180/Product: glucagon-like peptide 2 #status predicted <GL2>
F:127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following gl

Query Match 51.9% Score 241.5; DB 1; Length 180;
Best Local Similarity 60.3%; Pred. No. 1.2e-17;
Matches 47; Conservative 7; Mismatches 9; Indels 15; Gaps 1;

27 DKRHGEGFTSDVSYLEGQAAKEFIAMLVK-----GRHGEGFTSDVSS 71
50 DKRHSGCFTSDYSKILDSRRAQDFVQWLMNTKRNRRNTAKRHDFEPRRAEGFTSDVSS 109
72 YLEGQAAKEFIAMLVKGR 89
110 YLEGQAAKEFIAMLVKGR 127

RESULT 5

glucaagon precursor - rat
N:Contains: glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-like

C:Species: Rattus norvegicus (Norway rat)
C:Date: 30-Sep-1987 #sequence_revision 30-Sep-1987 #text_change 09-Jul-2004

C:Accession: A22655; A25190; A41198
R:Heinrich, G.; Gros, P.; Habener, J.F.

J. Biol. Chem. 259, 14082-14087, 1984
A>Title: Glucagon gene sequence: four of six exons encode separate functional domains of

A:Reference number: A22655; MUID:85054853; PMID:6094539
A:Accession: A22655

A:Molecule type: DNA
A:Residues: 1-180 <HRI>

A:Cross-references: UNIPROT:P06883; UNIPARC:UPI000002DB13; EMBL:K02809
A>Note: the authors translated the codon TRG for residue 10 as Glu and ACC for residue 5

R:Mojav, S.; Heinrich, G.; Wilson, I.B.; Ravazzola, M.; Orci, L.; Habener, J.F.
J. Biol. Chem. 261, 11880-11889, 1986

A>Title: Preproglucagon gene expression in pancreas and intestine diversifies at the lev
A:Reference number: A25190; MUID:86304324; PMID:3528148

A:Accession: A25190
A:Status: not compared with conceptual translation

A:Molecule type: mRNA
A:Residues: 1-180 <MRA>

A:Cross-references: UNIPARC:UPI000002DB13
R:Heinrich, G.; Gros, P.; Lund, P.K.; Bentley, R.C.; Habener, J.F.
Endocrinology 115, 2176-2181, 1984

A>Title: Pre-proglucagon messenger ribonucleic acid: nucleotide and encoded amino acid s
A:Reference number: A41198; MUID:85051023; PMID:6548696

A:Accession: A41198
A:Status: preliminary
A:Molecule type: mRNA

A:Residues: 1-180 <HE2>
A:Cross-references: UNIPARC:UPI000002DB13; GB:K02809; GB:K02810; GB:K02811; GB:K02812

C:Genetics: 31/2; 85/2; 131/2; 179/2
A:Introns: 31/2; 85/2; 131/2; 179/2

C:Superfamily: glucagon
C:Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; pancre

F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-180/Product: proglucaagon #status predicted <PGC>

F:21-50/Region: glicentin-related peptide #status predicted
F:53-81/Product: glucagon #status predicted <GCN>

F:98-127/Product: glucagon-like peptide 1 #status predicted <GL1>
F:146-180/Product: glucagon-like peptide 2 #status predicted <GL2>

F:127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following gl

Query Match 51.9% Score 241.5; DB 1; Length 180;
Best Local Similarity 60.3%; Pred. No. 1.2e-17;
Matches 47; Conservative 7; Mismatches 9; Indels 15; Gaps 1;

27 DKRHGEGFTSDVSYLEGQAAKEFIAMLVK-----GRHGEGFTSDVSS 71
50 DKRHSGCFTSDYSKILDSRRAQDFVQWLMNTKRNRRNTAKRHDFEPRRAEGFTSDVSS 109

72 YLEGQAAKEFIAMLVKGR 89
110 YLEGQAAKEFIAMLVKGR 127

RESULT 6

glucaagon precursor - guinea pig
N:Alternate names: oxyntomodulin
N:Contains: glicentin-related peptide; glucagon; glucagon-37 (oxyntomodulin); glucagon-]

C:Species: Cavia porcellus (guinea pig)
C:Date: 30-Sep-1987 #sequence_revision 31-Dec-1992 #text_change 09-Jul-2004

C:Accession: A24856; A23849; A60323
R:Seino, S.; Welsh, M.; Bell, G.I.; Chan, S.J.; Steiner, D.F.

FEBS Lett. 203, 25-30, 1986
A>Title: Mutations in the guinea pig preproglucagon gene are restricted to a specific pk

A:Reference number: A24856; MUID:86248118; PMID:3755107
A:Accession: A24856

A:Molecule type: mRNA
A:Residues: 1-180 <SER1>

A:Cross-references: UNIPROT:P05110; UNIPARC:UPI000012B82C; DDBJ:D00014; GB:N00014; NID:4

R:Huang, C.G.; Eng, J.; Pan, Y.C.E.; Hulmes, J.D.; Yalow, R.S.
Diabetes 35, 508-512, 1986

A>Title: Guinea pig glucagon differs from other mammalian glucagons.
A:Reference number: A23849; MUID:86165412; PMID:3956884

A:Accession: A23849
A:Molecule type: protein

A:Residues: 53-87 <HDA>
A:Cross-references: UNIPARC:UPI00001734FD

R:Conlon, J.M.; Hansen, H.F.; Schwartz, T.W.
Regul. Pept. 11, 309-320, 1985

A>Title: Primary structure of glucagon and a partial sequence of oxyntomodulin (glucaagon
A:Reference number: A60323; MUID:86017849; PMID:4048553

A:Accession: A60323
A:Molecule type: protein

A:Residues: 53-81 <CON>
A:Cross-references: UNIPARC:UPI00001734FD

A>Note: glucagon-37 was not completely sequenced

C:Superfamily: glucagon
C:Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; pancr.

F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-180/Product: proglucaagon #status predicted <PGC>

F:21-50/Region: glicentin-related peptide #status predicted
F:53-89/Product: glucagon-37 (oxyntomodulin) #status experimental <G37>

F:98-127/Product: glucagon-like peptide 1 #status predicted <GL1>
F:146-178/Product: glucagon-like peptide 2 #status predicted <GL2>

F:127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following gl

Query Match 51.7% Score 240.5; DB 1; Length 180;
Best Local Similarity 60.3%; Pred. No. 1.5e-17;
Matches 47; Conservative 7; Mismatches 9; Indels 15; Gaps 1;

27 DKRHGEGFTSDVSYLEGQAAKEFIAMLVK-----GRHGEGFTSDVSS 71
50 DKRHSGCFTSDYSKILDSRRAQDFVQWLMNTKRNRRNTAKRHDFEPRRAEGFTSDVSS 109

72 YLEGQAAKEFIAMLVKGR 89
110 YLEGQAAKEFIAMLVKGR 127

RESULT 7
glucaagon precursor - pig (fragment)
N:Alternate names: glicentin; oxyntomodulin
N:Contains: glicentin-related peptide; glucagon; glucagon-37 (oxyntomodulin); glucagon-

C:Species: Sus scrofa domestica (domestic pig)
C:Date: 17-Dec-1982 #sequence_revision 31-Mar-1993 #text_change 20-Mar-1998

C:Accession: A01540; A60312; A91781; B32614; A28064
R:Thim, L.; Moody, A.J.

Regul. Pept. 2, 139-150, 1981

Db 5 SIYFIAGLLIMIVGQSWQNDLPDTEKRSRFPKASQSEPLDESKQLNEVKRHSQGTFTSDY 64
 40 SSVYLEGQAARKEFIAMLVYK-----GRRGGSTPT 66
 Qy 65 SKYLDNRRAQDFVQWLMSTRKRNCGQGDENKDKFPDQLSSNAISRKHSRPERHARSTYT 124
 67 SDVSSYLEGQAARKEFIAMLVYKGR 89
 Db 125 SDITSYLEGQAARKEFIAMLVYNGR 147

RESULT 10
 151301
 proglucagon - chicken
 C/Species: Gallus gallus (chicken)
 C/Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 09-Jul-2004
 C/Accession: I51301
 R/Irwin, D.M.; Wong, J.
 Mol. Endocrinol. 9, 267-277, 1995
 A>Title: Trout and chicken proglucagon: alternative splicing generates mRNA transcripts
 A/Reference number: A55895; MID:95295739; PMID:7776976
 A/Accession: I51301
 A/Status: preliminary; translated from GB/EMBL/DBJ
 A/Molecule type: mRNA
 A/Residues: 1-206 <IRW>
 A/Cross-references: UNIPROT:P01277; UNIPARC:UPI000012B82E; GB:S78477; NID:G999386; PIDN:
 C/Superfamily: glucagon
 C/Keywords: duplication

Query Match 48.5%; Score 225.5; DB 2; Length 206;
 Best Local Similarity 37.1%; Pred. No. 6.1e-16;
 Matches 53; Conservative 15; Mismatches 20; Indels 55; Gaps 4;
 Qy 2 NIPYIFLLPVVQ-----LEHTRRG-----SLD-----KRGEGTPTSDV 39
 Db 5 SIYFIAGLLIMIVGQSWQNDLPDTEKRSRFPKASQSEPLDESKQLNEVKRHSQGTFTSDY 64
 Qy 40 SSVYLEGQAARKEFIAMLVYK-----GRRGGSTPT 66
 Db 65 SKYLDNRRAQDFVQWLMSTRKRNCGQGDENKDKFPDQLSSNAISRKHSRPERHARSTYT 124
 Qy 67 SDVSSYLEGQAARKEFIAMLVYKGR 89
 Db 125 SDITSYLEGQAARKEFIAMLVYNGR 147

RESULT 11
 151058
 glucagon 1 precursor - rainbow trout
 C/Species: Oncorhynchus mykiss (rainbow trout)
 C/Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 09-Jul-2004
 C/Accession: I51058; I51299; I51056; I51037; I51036; I51300
 R/Irwin, D.M.; Wong, J.
 Mol. Endocrinol. 9, 267-277, 1995
 A>Title: Trout and chicken proglucagon: alternative splicing generates mRNA transcripts
 A/Reference number: A55895; MID:95295739; PMID:7776976
 A/Accession: I51058
 A/Status: preliminary; translated from GB/EMBL/DBJ
 A/Molecule type: mRNA
 A/Residues: 1-178 <IRW>
 A/Cross-references: UNIPROT:Q91971; UNIPARC:UPI00000FB622; EMBL:U19917; NID:G736364; PIDN:
 A/Accession: I51299
 A/Status: preliminary; translated from GB/EMBL/DBJ
 A/Molecule type: mRNA
 A/Residues: 52-53, 'X', 55-123 <IR2>
 A/Cross-references: UNIPARC:UPI0000176628; GB:S78473; NID:G999382; PIDN:AAAB34504.1; PID:
 A/Accession: I51056
 A/Status: preliminary; translated from GB/EMBL/DBJ
 A/Molecule type: mRNA
 A/Residues: 58-123 <IR3>
 A/Cross-references: UNIPARC:UPI000017442D; EMBL:U19913; NID:G736360; PIDN:AAAC59667.1; PI
 A/Accession: I51037
 A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA
 A/Residues: 'M', 114-144 <IR4>
 A/Cross-references: UNIPARC:UPI0000176629; EMBL:U19919; NID:G736374; PIDN:AAAC60213.1; PI
 A/Accession: I51036
 A/Status: preliminary; translated from GB/EMBL/DBJ
 A/Molecule type: DNA
 A/Residues: 113-123 <IR5>
 A/Cross-references: UNIPARC:UPI0000171434; EMBL:U19918; NID:G736373; PIDN:AAAC60212.1; PI
 C/Genetics:
 A/Introns: 123/2
 C/Superfamily: glucagon
 C/Keywords: duplication

Query Match 44.8%; Score 208.5; DB 2; Length 178;
 Best Local Similarity 42.6%; Pred. No. 2.9e-14;
 Matches 40; Conservative 19; Mismatches 18; Indels 17; Gaps 1;
 Qy 13 FVQGLEHTHRRGSGLDKRHHGEGTPTSDVSSYLEGQAARKEFIAMLVYK----- 58
 Db 73 FVQWLMNSKRSKSGAPSRHADGTYSVSTYLDQAKDVFVSWLKSGRARRSABSRNCP 132
 Qy 59 ---RHGEGTPTSDVSSYLEGQAARKEFIAMLVYKGR 89
 Db 133 MSRRHVDGSPSTVSNKRVLDLSLAKKEYLLMVMTSK 166

RESULT 12
 GCRFB
 glucagon precursor - bullfrog (fragments)
 N/Alternative names: oxyntomodulin
 N/Contents: glucagon; glucagon-36 (oxyntomodulin); glucagon-like peptide 1; glucagon-11;
 C/Species: Rana catesbeiana (bullfrog)
 C/Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 20-Mar-1998
 C/Accession: B28091; D28091; D28091
 R/Pollack, H.G.; Hamblen, J.W.; Rouse, J.B.; Ebner, K.B.; Rawlitch, A.B.
 J. Biol. Chem. 263, 9746-9751, 1988
 A>Title: Isolation of peptide hormones from the pancreas of the bullfrog (Rana catesbeiana).
 A/Reference number: A92730; MID:88257102; PMID:3260236
 A/Accession: B28091
 A/Molecule type: protein
 A/Residues: 1-36 <PO2>
 A/Cross-references: UNIPARC:UPI0000173502
 A/Accession: D28091
 A/Molecule type: protein
 A/Residues: 69-101 <PO3>
 A/Cross-references: UNIPARC:UPI0000173502
 C/Superfamily: glucagon
 C/Keywords: carbohydrate metabolism; duplication; hormone; pancreas
 F:1-36/Product: glucagon-36 (oxyntomodulin) #status experimental <G36>
 F:1-29/Product: glucagon #status predicted <GCM>
 F:37-67/Product: glucagon-like peptide 1 #status experimental <GL1>
 F:69-101/Product: glucagon-like peptide 2 #status experimental <GL2>

Query Match 44.3%; Score 206; DB 1; Length 101;
 Best Local Similarity 52.6%; Pred. No. 2.9e-14;
 Matches 40; Conservative 17; Mismatches 15; Indels 4; Gaps 2;

Qy 13 FVQGLEHTHRRGSGLDKRHHGEGTPTSDVSSYLEGQAARKEFIAMLVYK--HGEGTPTSDV 70
 Db 22 FVQWLMNSKRSKSGGIS--HADGTPTSDVSSYLEKKAKEFDWLIKRRPKRADSDGFTSDFN 79
 Qy 71 SYLEGQAARKEFIAMLV 86
 Db 80 KALDIKAAQGEFLDWII 95

RESULT 13
 GCAF2
 glucagon 2 precursor - American goosefish

N:Contains: glucagon; glucagon-like peptide 1
 C:/Species: Icthyophis americanus (American goosfish)
 C:/Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 09-Jul-2004
 C:/Accession: A05150
 R:/Name: P.K.; Goodman, R.H.; Montminy, M.R.; Dee, P.C.; Habener, J.F.
 J. Biol. Chem. 258, 3280-3284, 1983
 A:/Title: Anglerfish Islet pre-proglucagon II. Nucleotide and corresponding amino acid se
 A:/Reference number: A05150; MWID:83135785; PMID:6338015
 A:/Accession: A05150
 A:/Molecule type: mRNA
 A:/Residues: 1-122 <LUN>
 A:/Cross-references: UNIPROT:P04092; UNIPARC:UPI000012B81E; GB:J00933; NID:g64021; PIDN:C
 C:/Superfamily: glucagon
 C:/Keywords: carbohydrate metabolism; duplication; hormone; pancreas
 F1-21/Domain: signal sequence #status predicted <SIG>
 F1-22-122/Product: proglucagon 2 #status predicted <PGC2>
 F1-2-80/Product: glucagon #status predicted <GCN>
 F1-89-119/Product: glucagon-like peptide 1 #status predicted <GL1>

Query Match 43.1%; Score 200.5; DB 1; Length 122;
 Best Local Similarity 53.6%; Pred. No. 1.3e-13;
 Matches 37; Conservative 12; Mismatches 13; Indels 7; Gaps 1;

QY 28 KRHGGTFTSDVSSYLEGQAAKEFIAMLYKGR-----RHGGTFTSDVSSYLEGQAAKE 80
 DB 50 KRHSEGTFTSDVSSYLEGQAAKEFIAMLYKGR-----RHGGTFTSDVSSYLEGQAAKE 109
 QY 81 FIAMLYKGR 89
 DB 110 FVSWLKAQR 118

RESULT 14

glucagon II precursor - rainbow trout
 C:/Species: Oncorhynchus mykiss (rainbow trout)
 C:/Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 09-Jul-2004
 C:/Accession: I51057; I51039; I51038
 R:/Name: D.M.; Wong, J.
 Mol. Endocrinol. 9, 267-277, 1995
 A:/Title: Trout and chicken proglucagon: alternative splicing generates mRNA transcripts
 A:/Reference number: A55895; MWID:95295739; PMID:7776976
 A:/Accession: I51057
 A:/Status: preliminary; translated from GB/EMBL/DBJ
 A:/Molecule type: mRNA
 A:/Residues: 1-178 <TRW>
 A:/Cross-references: UNIPROT:Q91189; UNIPARC:UPI000000FE623; EMBL:U19914; NID:g736362; PI
 A:/Accession: I51039
 A:/Status: preliminary; translated from GB/EMBL/DBJ
 A:/Molecule type: DNA
 A:/Residues: 113-144 <IR2>
 A:/Cross-references: UNIPARC:UPI0000171437; EMBL:U19916; NID:g736369; PIDN:AAC60210.1; PI
 A:/Accession: I51038
 A:/Status: preliminary; translated from GB/EMBL/DBJ
 A:/Molecule type: DNA
 A:/Residues: 113-123 <IR3>
 A:/Cross-references: UNIPARC:UPI0000171436; EMBL:U19915; NID:g736368; PIDN:AAC60209.1; PI
 C:/Genetics: 123/2
 A:/Intons: 123/2
 C:/Superfamily: glucagon
 C:/Keywords: duplication

Query Match 43.1%; Score 200.5; DB 2; Length 178;
 Best Local Similarity 40.4%; Pred. No. 1.9e-13;
 Matches 38; Conservative 20; Mismatches 19; Indels 17; Gaps 1;

QY 13 FVGGLEHTTRRGLDKRHGGTFTSDVSSYLEGQAAKEFIAMLYKGR----- 58
 DB 73 FLHMWLNKSKSGAPSRKRDHDTYTSVYTLQDQAAKDFVSWLKSQPARRESAEESSWNGP 132
 QY 59 ---RHGGTFTSDVSSYLEGQAAKEFIAMLYKGR 89
 DB 133 MSRRHVDGSEFTSDVSNKVLDSIAAKEVYLLWMTSK 166

RESULT 15

glucagon precursor - channel catfish (fragments)
 C:/Species: Ictalurus punctatus (channel catfish)
 C:/Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 09-Jul-2004
 C:/Accession: A05166; A05167
 R:/Name: R.; Andrews, P.C.; Romner, P.
 J. Biol. Chem. 260, 3910-3914, 1985
 A:/Title: Isolation and structures of glucagon and glucagon-like peptide from catfish pan
 A:/Reference number: A92514; MWID:85157536; PMID:3838546
 A:/Accession: A05166
 A:/Molecule type: protein
 A:/Residues: 1-29 <AND1>
 A:/Cross-references: UNIPROT:P04093; UNIPARC:UPI0000173508
 A:/Accession: A05167
 A:/Molecule type: protein
 A:/Residues: 30-63 <AND2>
 A:/Cross-references: UNIPARC:UPI0000173509
 C:/Superfamily: glucagon
 C:/Keywords: carbohydrate metabolism; duplication; hormone; pancreas
 F1-29/Product: glucagon #status experimental <GCN>
 F1-30-63/Product: glucagon-like peptide 1 #status experimental <GL1>

Query Match 40.5%; Score 188.5; DB 1; Length 63;
 Best Local Similarity 56.7%; Pred. No. 1.1e-12;
 Matches 34; Conservative 12; Mismatches 13; Indels 1; Gaps 1;

QY 30 HREGTFTSDVSSYLEGQAAKEFIAMLYKGRHGGTFTSDVSSYLEGQAAKEFIAMLYKGR 89
 DB 1 HSEGTFTSDVSSYLEGQAAKEFIAMLYKGRHGGTFTSDVSSYLEGQAAKEFIAMLYKGR 59

Search completed: April 19, 2006, 12:10:00
 Job time : 4.04545 secs

GenCore version 5.1.1.7
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OM protein - protein search, using sw model

Run on: April 19, 2006, 11:57:02 ; Search time 23.5142 Seconds
(without alignments)
2670.387 Million cell updates/sec

Title: US-10-775-180-449
Perfect score: 465
Sequence: 1 MNIFPIFLPLSTFVQGLHRT.....SSYLEGQAQKRFIAMLVKGR 89

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2166443 seqs, 705528306 residues

Total number of hits satisfying chosen parameters: 2166443

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: UnIProt 05.80:*
1: uniprot_sprot:*
2: uniprot_tr.embl:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Table with columns: Result No., Score, Query Match, Length, DB, ID, Description. Row 1: 1, 251, 54.0, 220, 2, Q8UW19_9NEOB, Q8UW19 hoplobatrax...

Table with columns: ID, Score, Length, DB, ID, Description. Row 1: 32, 200, 43.0, 860, 2, Q4RQJ4_TETNG, Q4RQJ4 tetraodon n...

ALIGNMENTS

RESULT 1
Q8UW19_9NEOB PRELIMINARY; PRT; 220 AA.
AC Q8UW19_9NEOB
DT 01-MAR-2002 (TRMBLrel. 20, Created)
DT 01-MAR-2002 (TRMBLrel. 20, Last sequence update)
DE Proglucagon.
OS Hoplobatrachus rugulosus.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidae; Ranidae;
OC Hoplobatrachus.
OX NCBI_TaxID=110072;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Yeung C.-M., Chow B.K.C.;
RT "Identification of a proglucagon cDNA from Rana tigrina rugulosa that
RT encodes two GLP-1s."
RL Genbank:EMBL:124:0-0(2001).
DR EMBL; AF324209; AAL35758.1; -; mRNA.
DR HSSP; P01274; IGCN.
DR GO; GO:0005576; C:extracellular region; IEA.
DR GO; GO:0005179; F:hormone activity; IEA.
DR InterPro; IPR000532; Glucagon.
DR Pfam; PF00123; Hormone 2; 4.
DR PRINTS; PR00275; GLUCAGON.
DR SMART; SM0070; GLUCA; 4.
DR PROSITE; PS00260; GLUCAGON; 4.
SQ SEQUENCE 220 AA; 25615 MW; C72D926E7F89E381 CRC64;
Query Match 54.0%; Score 251; DB 2; Length 220;
Best Local Similarity 54.9%; Pred. No. 2.9e-18;
Matches 50; Conservative 14; Mismatches 13; Indels 14; Gaps 2;

GN Name=GCC;
 OS Mesocricetus auratus (Golden hamster).
 OC Eukaryota; Metazoa; Chordata; Cranialta; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
 OC Muridae; Cricetidae; Cricetinae; Mesocricetus.
 OX NCBI_TaxID=10036;
 RN [1]
 RN NCUBOTIDE SEQUENCE.
 RA MEDLINE=83167563; PubMed=6835407;
 RA Bell G.I., Santerre R.F., Mullenbach G.T.;
 RT "Hamster preproglucagon contains the sequence of glucagon and two
 RT related peptides.";
 RL Nature 302:716-718(1983).
 RN [2]
 RN SEQUENCE REVISION TO 12-15.
 RA Bell G.I.;
 RN Submitted (JUN-1985) to the EMBL/GenBank/DBJ databases.
 RP [3]
 RP REVIEW.
 RA MEDLINE=22442611; PubMed=12554744; DOI=10.1210/me.2002-0306;
 RA Drucker D.J.;
 RT "Glucagon-like peptides: regulators of cell proliferation,
 RT differentiation, and apoptosis.";
 RL Mol. Endocrinol. 17:161-171(2003).
 RN [4]
 RN REVIEW.
 RA MEDLINE=22513095; PubMed=12626323; DOI=10.1152/ajpendo.00492.2002;
 RA Jiang G., Zhang B.B.;
 RT "Glucagon and regulation of glucose metabolism.";
 RL An. J. Physiol. 284:E671-E678(2003).
 RN [5]
 RN REVIEW.
 RA PubMed=10322410;
 RA Drucker D.J.;
 RT "Glucagon-like peptide 2.";
 RL Trends Endocrinol. Metab. 10:153-156(1999).
 RN [6]
 RN REVIEW.
 RA MEDLINE=20073561; PubMed=10605628; DOI=10.1210/er.20.6.876;
 RA Kleffer T.J., Habener J.F.;
 RT "The glucagon-like peptides.";
 RL Endocr. Rev. 20:876-913(1999).
 CC -1- FUNCTION: Glucagon plays a key role in glucose metabolism and
 CC homeostasis. Regulates blood glucose by increasing gluconeogenesis
 CC and decreasing glycolysis. A counterregulatory hormone of insulin,
 CC raises plasma glucose levels in response to insulin-induced
 CC hypoglycemia (By similarity).
 CC -1- FUNCTION: GLP-1 is a potent stimulator of glucose-dependent
 CC insulin release. Play important roles on gastric motility and the
 CC suppression of satiety and stimulation of glucose disposal in
 CC peripheral tissues, independent of the actions of insulin. Have
 CC growth-promoting activities on intestinal epithelium. May also
 CC regulate the hypothalamic pituitary axis (HPA) via effects on LH,
 CC TSH, CRH, oxytocin, and vasopressin secretion. Increases islet
 CC mass through stimulation of islet neogenesis and pancreatic beta
 CC cell proliferation (By similarity).
 CC -1- FUNCTION: GLP-2 stimulates intestinal growth and up-regulates
 CC villus height in the small intestine, concomitant with increased
 CC crypt cell proliferation and decreased enterocyte apoptosis. The
 CC gastrointestinal tract, from the stomach to the colon is the
 CC principal target for GLP-2 action. Plays a key role in nutrient
 CC homeostasis, enhancing nutrient assimilation through enhanced
 CC gastrointestinal function, as well as increasing nutrient
 CC disposal. Stimulates intestinal glucose transport and decreases
 CC mucosal permeability (By similarity).
 CC -1- FUNCTION: Oxyntomodulin significantly reduces food intake (By
 CC similarity).
 CC -1- FUNCTION: Glucocortin may modulate gastric acid secretion and
 CC gastro-pyloro-duodenal activity (By similarity).
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- INDUCTION: Glucagon release is stimulated by hypoglycemia and
 CC inhibited by hyperglycemia, insulin, and somatostatin. GLP-1 and

CC GLP-2 are induced in response to nutrient ingestion (By
 CC similarity).
 CC -1- PFM: Proglucagon is posttranslationally processed in a tissue-
 CC specific manner in pancreatic A cells and intestinal L cells. In
 CC pancreatic A cells, the major bioactive hormone is glucagon
 CC cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1
 CC liberates GLP-1, GLP-2, glucocortin and oxyntomodulin. GLP-1 is
 CC further N-terminally truncated by posttranslational processing in
 CC the intestinal L cells resulting in GLP-1(7-37) GLP-1(7-36)amide.
 CC The C-terminal amidation is neither important for the metabolism
 CC of GLP-1 nor for its effects on the endocrine pancreas (By
 CC similarity).
 CC -1- SIMILARITY: Belongs to the glucagon family.
 CC -----
 CC This Swiss-Prot entry is copyrighted. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use as long as its content is in no way modified and this statement is not
 CC removed.
 CC -----
 CC DR EMBL; J00059; AAA37074.1; -, mRNA.
 CC DR HSSP; P01275; IDOR.
 CC DR InterPro; IPR000532; Glucagon.
 CC DR Pfam; PF00123; Hormone_2; 3.
 CC DR PRINTS; PR00275; GLUCAGON.
 CC DR PROSITE; PS00260; GLUCAGON; 4.
 CC KW Amidation; Cleavage on pair of basic residues; Glucagon family;
 CC KM Hormone; Signal.
 CC FT SIGNAL 1 20
 CC FT PEPTIDE 21 89
 CC FT PEPTIDE 21 50
 CC FT PEPTIDE 53 89
 CC FT PEPTIDE 53 81
 CC FT PROPEP 84 89
 CC FT PEPTIDE 92 128
 CC FT PEPTIDE 98 128
 CC FT PEPTIDE 98 127
 CC FT PROPEP 131 145
 CC FT PEPTIDE 146 178
 CC FT SITE 52 53
 CC FT SITE 83 84
 CC FT SITE 91 92
 CC FT SITE 97 98
 CC FT SITE 130 131
 CC FT SITE 145 146
 CC FT MOD_RES 127 127
 CC SQ SEQUENCE 180 AA; 20954 MW; 027918A9D7AADD48 CRC64;
 CC
 CC Query Match 53.7%; Score 249.5; DB 1; Length 180;
 CC Best Local Similarity 44.0%; Pred. No. 3; 3e-18;
 CC Matches 55; Conservative 13; Mismatches 20; Indels 37; Gaps 3;
 CC
 CC QY 2 NIFYRPLFLSFGVQ-----LEHTGRG-----SLDRHGEGFTSPV 39
 CC | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 CC 3 NIYYVGFVTVLWQSSWQHSI LDPTTEKRSKSPASQDTPLDIPDDQINEDVGRHSQGTFTSY 62
 CC | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 CC QY 40 SSYLEGQAARFIAWLVK-----GRHGEFTSPDVSSYLEGQAARFIAW 84
 CC | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 CC DB 63 SKYLDERRAQQDFTVWMTKRRRNNTAKKHDFBRHAEFTFSVSSYLEGQAARFIAW 122
 CC | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 CC QY 85 LVYGR 89
 CC | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 CC DB 123 LVYGR 127
 CC | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 CC
 CC RESULT 3
 CC GLUC_SHEEP
 CC ID GLUC_SHEEP STANDARD; PRT; 176 AA.

DB 63 SKYLDSRBAQDPVQWLMTKRNKUNIAKRHHDEPFRHAEGFTSPVSSYLEGQAARFIAM 122

OY 85 LVKGR 89

DB 123 LVKGR 127

RESULT: 5

GLUC_PIG STANDARD; PRT; 180 AA.

ID P01274; Q864V8;

DT 21-JUL-1986 (Rel. 01, Created)

DT 29-MAR-2004 (Rel. 43, Last sequence update)

DT 13-SEP-2005 (Rel. 48, Last annotation update)

DE Glucagon precursor [Contractin; Glucocentrin; Glucocentrin-related polypeptide (GRP); Oxyntomodulin (OXY) (OXM); Glucagon; Glucagon-like peptide 1 (GLP-1); Glucagon-like peptide 1(7-37) (GLP-1(7-37))]; Glucagon-like peptide 1(7-36) (GLP-1(7-36)); Glucagon-like peptide 2 (GLP-2)].

GN Name-GCG;

OS Sus scrofa (Pig).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Suina; Suidae; Sus.

OC NCBI_TaxID=99823;

OX [1]

RP NUCLEOTIDE SEQUENCE.

RC TISSUE=Pancreas, and Small intestine;

RA Siggers R.H., Goldade B.G., Laarveld B., Van Kessel A.G.;

RT "Cloning of porcine proglucagon.";

RL Submitted (FEB-2003) to the EMBL/GenBank/DBJ databases.

RP [2]

RP PROTEIN SEQUENCE OF 21-89.

RX MEDLINE=91248172; PubMed=6894800; DOI=10.1016/0167-0115(81)90007-0;

RA Thim L., Moody A.J.;

RT "The primary structure of porcine glucocentrin (proglucagon).";

RL Regul. Pept. 2:139-150(1981).

RP [3]

RP PROTEIN SEQUENCE OF 21-89.

RX MEDLINE=92221776; PubMed=7045633; DOI=10.1016/0196-9781(81)90007-3;

RA Thim L., Moody A.J.;

RT "The amino acid sequence of porcine glucocentrin.";

RL Peptides 2 Suppl. 2:37-39(1981).

RP [4]

RP PROTEIN SEQUENCE OF 53-81.

RA Bromer W.W., Simn L.G., Behrens O.K.;

RT "The amino acid sequence of glucagon. V. Location of amide groups, acid degradation studies and summary of sequential evidence.";

RL J. Am. Chem. Soc. 79:2807-2810(1957).

RP [5]

RP PROTEIN SEQUENCE OF 98-127.

RX MEDLINE=89327238; PubMed=2753890;

RA Orskov C., Bersani M., Johnsen A.H., Hoejrup P., Holst J.J.;

RT "Complete sequences of glucagon-like peptide-1 from human and pig small intestine.";

RL J. Biol. Chem. 264:12826-12829(1989).

RP [6]

RP PROTEIN SEQUENCE OF 131-178.

RX MEDLINE=88243712; PubMed=3379036;

RA Buhl T., Thim L., Kofod H., Orskov C., Harling H., Holst J.J.;

RT "Naturally occurring products of proglucagon 111-160 in the porcine and human small intestine.";

RL J. Biol. Chem. 263:8621-8624(1988).

RP [7]

RP TISSUE SPECIFICITY.

RX MEDLINE=87004290; PubMed=3530719;

RA Orskov C., Holst J.J., Knudtsen S., Baldissera F.G., Poulsen S.S., Nielsen O.V.;

RT "Glucagon-like peptides GLP-1 and GLP-2, predicted products of the glucagon gene, are secreted separately from pig small intestine but not pancreas.";

RL Endocrinology 119:1467-1475(1986).

RP [8]

RP REVIEW.

RX MEDLINE=22442611; PubMed=12554744; DOI=10.1210/me.2002-0306;

RA Drucker D.J.;

RT "Glucagon-like peptides: regulators of cell proliferation, differentiation, and apoptosis.";

RL MGI. Endocrinol. 17:161-171(2003).

RN [9]

RP REVIEW.

RX MEDLINE=22513095; PubMed=12626323; DOI=10.1152/ajpendo.00492.2002;

RA Jiang G., Zhang B.;

RT "Glucagon and regulation of glucose metabolism.";

RL Am. J. Physiol. 284:E671-E678(2003).

RN [10]

RP REVIEW.

RX PubMed=10322410;

RA Drucker D.J.;

RT "Glucagon-like peptide 2.";

RL Trends Endocrinol. Metab. 10:153-156(1999).

RN [11]

RP REVIEW.

RX MEDLINE=20073561; PubMed=10605628; DOI=10.1210/er.20.6.876;

RA Kieffer T.J., Habener J.F.;

RT "The glucagon-like peptides.";

RL Endocr. Rev. 20:876-913(1999).

RN [12]

RP X-RAY CRYSTALLOGRAPHY (3.0 ANGSTROMS) OF 53-81.

RX MEDLINE=76051297; PubMed=171582;

RA Seaki K., Dockertill S., Adamiak D.A., Tickle I.J., Blundell T.L.;

RT "X-ray analysis of glucagon and its relationship to receptor binding.";

RL Nature 257:751-757(1975).

-1- FUNCTION: Glucagon plays a key role in glucose metabolism and homeostasis. Regulates blood glucose by increasing gluconeogenesis and decreasing glycolysis. A counterregulatory hormone of insulin, raises plasma glucose levels in response to insulin-induced hypoglycemia (by similarity).

FUNCTION: GLP-1 is a potent stimulator of glucose-dependent insulin release. Play important roles on gastric motility and the suppression of plasma glucagon levels. May be involved in the peripheral tissues, independent of the actions of insulin. Have growth-promoting activities on intestinal epithelium. May also regulate the hypothalamic pituitary axis (HPA) via effects on LH, TSH, CRH, oxytocin, and vasopressin (by similarity).

-1- FUNCTION: GLP-2 stimulates intestinal growth and up-regulates villus height in the small intestine, concomitant with increased crypt cell proliferation and decreased enterocyte apoptosis. The gastrointestinal tract, from the stomach to the colon is the principal target for GLP-2 action. Plays a key role in nutrient homeostasis, enhancing nutrient assimilation through enhanced gastrointestinal function, as well as increasing nutrient disposal. Stimulates intestinal glucose transport and decreases mucosal permeability (by similarity).

-1- FUNCTION: Oxyntomodulin significantly reduces food intake (by similarity).

-1- FUNCTION: Glucocentrin may modulate gastric acid secretion and gastro-pyloro-duodenal activity.

-1- SURCELLULAR LOCATION: Secreted.

-1- TISSUE SPECIFICITY: Glucagon is secreted in the A cells of the islets of Langerhans. GLP-1, GLP-2, oxyntomodulin and glucocentrin are secreted from enteroendocrine cells throughout the gastrointestinal tract. GLP1 and GLP2 are also secreted in selected neurons in the brain.

-1- INDUCTION: Glucagon release is stimulated by hypoglycemia and inhibited by hyperglycemia, insulin, and somatostatin. GLP-1 and GLP-2 are induced in response to nutrient ingestion (by similarity).

-1- PTM: Proglucagon is posttranslationally processed in a tissue-specific manner in pancreatic A cells and intestinal L cells. In pancreatic A cells, the major bioactive hormone is glucagon cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1 liberates GLP-1, GLP-2, glucocentrin and oxyntomodulin. GLP-1 is further N-terminally truncated by posttranslational processing in the intestinal L cells resulting in GLP-1(7-37) GLP-1-(7-36)amide.

The C-terminal amidation is neither important for the metabolism of GLP-1 nor for its effects on the endocrine pancreas (By similarity).

-1- MISCELLANEOUS: GLP-2 does not have cleavage on a pair of basic residues at C-terminus as in other mammals.

-1- SIMILARITY: Belongs to the glucagon family.

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EMBL; AY242124; AAC08211.1; -; mRNA.
PDB; 1G6N; X-ray; @=53-81.
InterPro: IPR000532; Glucagon.
Pfam; PF00123; Hormone_2; 3.
PRINTS; PR00275; GLUCAGON; 3.
SMART; SM00070; GLUCA; 3.
PROSITE; PS00260; GLUCAGON; 4.
3D-structure: Amidation; Cleavage on pair of basic residues; KM Direct protein sequencing; Glucagon family; Hormone; Signal.

FT SIGNAL 1 20
FT PEPIDE 21 50
FT PEPIDE 53 89
FT PEPIDE 53 81
FT PROPEP 84 89
FT PEPIDE 92 128
FT PEPIDE 98 128
FT PEPIDE 98 127
FT PROPEP 131 145
FT PEPIDE 146 180
FT SITE 52 53
FT SITE 83 84
FT SITE 91 92
FT SITE 97 98
FT SITE 130 131
FT SITE 145 146
FT MOD RES 127 127
FT CONFLICT 143 143
FT SEQUNCE 180 AA; 21029 MW; 362997AB72197EB6 CRC64;

Query Match 52.6%; Score 244.5; DB 1; Length 180;
Best Local Similarity 42.7%; Pred. No. 1.1e-17;
Matches 53; Conservative 15; Mismatches 19; Indels 37; Gaps 3;

QY IYVYIPLFLIFVVOG-----LEHTRRRG-----SLDKRHRGGRTFSDVS 40
DB 4 IYVYAGLIFVWLVVQSWKRSIQNTBKRKSRFPAPQOTDLPDPDQMTBKRKRSQGTFTSDVS 63
QY 41 SYLEGAAKKEFIAMLVK-----GRHGEGRTFSDVSYLEGAAKKEFIAMLV 85
DB 64 KYLDSRRAGQFVQWLMWTKKKNKNNIAKRRHDEPRFHAEGTFTSDVSYLEGAAKKEFIAMLV 123
QY 86 VKRR 89
DB 124 VKGR 127

RESULT 6
GLUC_CANFA STANDARD; PRT; 180 AA.
AC P29794; Q95LGO; R29794; Q95LGO; 25, Created)
DT 01-APR-1993 (Rel. 25, Created)
DT 29-MAR-2004 (Rel. 43, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE Glucagon precursor [Contains: Glucicetin; Glucicentin-related polypeptide (GRPp); Oxyntomodulin (OXY) (OXM); Glucagon; Glucagon-like peptide 1 (GLP-1); Glucagon-like peptide 1 (7-37) (GLP-1(7-37)); Glucagon-like

DE peptide 1(7-36) (GLP-1(7-36)); Glucagon-like peptide 2 (GLP-2)].
ON Name=GG; OS Name=Glucagon; GN Name=Glucagon (Dog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; OC Mammalia; Eutheria; Laurasiatheria; Carnivora; Fissipedia; Canidae;
OC Canis.
OX NCBI_TaxID=9615;
RN (1)
RN NUCLEOTIDE SEQUENCE.
RP TISSUE=Pancreas, and Stomach;
RX PubMed=11916259;
RA Irwin D.M.;
RT "DNA Cloning of Proglucagon from the Stomach and Pancreas of the
RT Dog";
RL DNA Seq. 12:253-260(2001).
RN (2)
RN PROTEIN SEQUENCE OF 21-89.
RC TISSUE=ileum;
RX MEDLINE=89185675; PubMed=3238052; DOI=10.1016/0167-0115(88)90230-3;
RA Shimomura Y., Eng J., Yalow R.S.;
RT "Immunoreactive glucagons purified from dog pancreas, stomach and
RT ileum";
RL Regul. Pept. 23:299-308(1988).
RN (3)
RN PROCESSING BY PCSK1 AND PCSK2.
RX PubMed=10499540; DOI=10.1210/en.140.10.4800;
RA Dahlolt A.B., Buchan A.M., Holst J.J., Kofod H.;
RT "Proglucagon processing profile in canine L cells expressing
RT endogenous prohormone convertase 1/3 and prohormone convertase 2.";
RL Endocrinology 140:4800-4808(1999).
RN (4)
RN REVIEW.
RX PubMed=12554744; DOI=10.1210/me.2002-0306;
RA Drucker D.J.;
RT "Glucagon-like peptides: regulators of cell proliferation,
RT differentiation, and apoptosis";
RL Mol. Endocrinol. 17:161-171(2003).
RN (5)
RN REVIEW.
RX PubMed=12626323; DOI=10.1152/ajpendo.00492.2002;
RA Jiang G., Zhang B.B.;
RT "Glucagon and regulation of glucose metabolism.";
RL Am. J. Physiol. 284:E671-E678(2003).
RN (6)
RN REVIEW.
RX PubMed=10322410;
RA Drucker D.J.;
RT "glucagon-like peptide 2";
RL Trends Endocrinol. Metab. 10:153-156(1999).
RN (7)
RN REVIEW.
RX PubMed=10605628; DOI=10.1210/er.20.6.876;
RA Kieffer T.J., Habener J.F.;
RT "The glucagon-like peptides";
RL Endocr. Rev. 20:876-913(1999).
CC -1- FUNCTION: Glucagon plays a key role in glucose metabolism and
CC homeostasis. Regulates blood glucose by increasing gluconeogenesis
CC and decreasing glycolysis. A counterregulatory hormone of insulin,
CC raises plasma glucose levels in response to insulin-induced
CC hypoglycemia (By similarity).
CC -1- FUNCTION: GLP-1 is a potent stimulator of glucose-dependent
CC insulin release. Play important roles on gastric motility and the
CC suppression of satiety and stimulation of glucose disposal in
CC peripheral tissues, independent of the actions of insulin. Have
CC growth-promoting activities on intestinal epithelium. May also
CC regulate the hypothalamic pituitary axis (HPA) via effects on LH,
CC TSH, CRH, oxytocin, and vasopressin secretion. Increases islet
CC mass through stimulation of islet neogenesis and pancreatic beta
CC cell proliferation (By similarity).
CC -1- FUNCTION: GLP-2 stimulates intestinal growth and up-regulates
CC villus height in the small intestine, concomitant with increased
CC crypt cell proliferation and decreased enterocyte apoptosis. The

CC gastrointestinal tract, from the stomach to the colon is the
 CC principal target for GLP-2 action. Plays a key role in nutrient
 CC homeostasis, enhancing nutrient assimilation through enhanced
 CC gastrointestinal function, as well as increasing nutrient
 CC disposal. Stimulates intestinal glucose transport and decreases
 CC mucosal permeability (By similarity).
 CC -1- FUNCTION: Oxyntomodulin significantly reduces food intake (By
 CC similarity).
 CC -1- FUNCTION: Glucagonin may modulate gastric acid secretion and
 CC gastro-pyloro-duodenal activity.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: Glucagon is secreted in the A cells of the
 CC islets of Langerhans. GLP-1, GLP-2, oxyntomodulin and glucagonin
 CC are secreted from enteroendocrine cells throughout the
 CC gastrointestinal tract. GLP1 and GLP2 are also secreted in
 CC selected neurons in the brain.
 CC -1- INDUCTION: Glucagon release is stimulated by hypoglycemia and
 CC inhibited by hyperglycemia, insulin, and somatostatin. GLP-1 and
 CC GLP-2 are induced in response to nutrient ingestion (By
 CC similarity).
 CC -1- PFM: Proglucagon is posttranslationally processed in a tissue-
 CC specific manner in pancreatic A cells and intestinal L cells. In
 CC pancreatic A cells, the major bioactive hormone is glucagon
 CC cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1
 CC liberates GLP-1, GLP-2, glucagonin and oxyntomodulin. GLP-1 is
 CC further N-terminally truncated by posttranslational processing in
 CC the C-terminal L cells resulting in GLP-1(7-37) GLP-1(7-36) amide.
 CC The C-terminal amidation is neither important for the metabolism
 CC of GLP-1 nor for its effects on the endocrine pancreas (By
 CC similarity).
 CC -1- SIMILARITY: Belongs to the glucagon family.
 CC
 CC This Swiss-Prot entry is copyrighted. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation
 CC at the European Bioinformatics Institute. There are no restrictions on its
 CC use as long as its content is in no way modified and this statement is not
 CC removed.
 CC
 CC EMBL; AF308439; AAL09425.1; -; mRNA.
 CC PIR; A60318; GCDG69.
 CC HSSP; P01274; IGCN.
 CC DR Ensembl; ENSGAPG00000010414; Canis familiaris.
 CC DR InterPro; IPR000532; Glucagon.
 CC DR Pfam; PF00123; Hormone_2; 3.
 CC DR PRINTS; PR00275; GLUCAGON.
 CC DR SMART; SM00070; GLUCA; 3.
 CC DR PROSITE; PS00260; GLUCAGON; 4.
 CC AMIAdation: Cleavage on pair of basic residues;
 CC Direct protein sequencing; Glucagon family; Hormone; Signal.
 CC KW SIGNAL
 CC FT SIGNAL 1 20
 CC FT PRTIDE 21 89
 CC FT PRTIDE 50 50
 CC FT PRTIDE 53 89
 CC FT PRTIDE 84 89
 CC FT PROPEP 92 128
 CC FT PRTIDE 98 128
 CC FT PRTIDE 98 127
 CC FT PROPEP 131 145
 CC FT PRTIDE 146 178
 CC FT SITE 52 53
 CC FT SITE 83 84
 CC FT SITE 91 92
 CC FT SITE 97 98
 CC FT SITE 130 131
 CC FT SITE 145 146
 CC FT MOD_RSS 127 127
 CC SEQUENCE 180 AA; 21115 MW; 80F66941AFC324FP CRC64;

Query Match 52.4%; Score 243.5; DB 1; Length 180;
 Best Local Similarity 42.4%; Pred. No. 1.4e-17;

Matches 53; Conservative 15; Mismatches 20; Indels 37; Gaps 3;
 QY 2 NIFYRFLPLISFVQG-----LEHTRRG-----SLDRKRGEGTFTSDV 39
 Db 3 STYFVAGLFRVMLVQSSWORSLOPTEKRSFSPAPQTRPLANDDDQNMEDRHSQGTFTSDY 62
 QY 40 SSYLEQAQAKEFPIAMLVK-----GRHGEFTFSDVSSYLEQAQAKEFIAM 84
 Db 63 SKTLDERRRQDPFQWMTNRKMNNTAKRHDERRRAEGTFTSDVSSYLEQAQAKEFIAM 122
 QY 85 LVKGR 89
 Db 123 LVKGR 127

RESULT 7
 GLUC_MOUSE STANDARD; PRT; 180 AA.
 ID GIUC_MOUSE
 AC P55095;
 DT 01-OCT-1996 (Rel. 34, Created)
 DT 10-OCT-1996 (Rel. 34, Last sequence update)
 DT 10-MAY-2005 (Rel. 47, Last annotation update)
 DE Glucagon precursor [Contains: Glucagonin; Glucagonin-related polypeptide
 DE (GRPp); Oxyntomodulin (OXY) (OMX); Glucagon; Glucagon-like peptide 1
 DE (GLP-1); Glucagon-like peptide 1(7-37) (GLP-1(7-37)); Glucagon-like
 DE peptide 1(7-36) (GLP-1(7-36)); Glucagon-like peptide 2 (GLP-2)].
 GN Name=Cggl; (Mouse).
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
 OC Muridae; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RN NCLEBOTIDE SEQUENCE.
 RC TISSUE=Pancreatic islets;
 RX MEDLINE=95247722; PubMed=7730317; DOI=10.1074/jbc.270.17.10136;
 RA Rothenberg M.R., Ellertson C.D., Klein K., Zhou Y., Linberg I.,
 RA McDonald J.K., Mackin R.B., Noe B.D.;
 RT "Processing of mouse proglucagon by recombinant prohormone convertase
 RT 1 and immunopurified prohormone convertase 2 in vitro.";
 RL J. Biol. Chem. 270:10136-10146(1995).
 RN [2]
 RN NCLEBOTIDE SEQUENCE.
 RA Shamsadin R., Knoppel W.;
 RT "mouse glucagon full length cDNA";
 RL Submitted (JUN-2000) to the EMBL/GenBank/DBJ databases.
 RN [3]
 RN NCLEBOTIDE SEQUENCE [LARGE SCALE MRNA].
 RP STRA1N=C57BL/6J; TISSUE=Pancreas;
 RC MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;
 RA Okazaki I., Furuno M., Kanakawa T., Adachi J., Bono H., Kondo S.,
 RA Nakaido I., Oshino N., Saito R., Suzuki H., Yamana I., Kiyosawa H.,
 RA Yagi K., Tomaru H., Hasegawa Y., Nogami A., Schnobach C., Gyojohori T.,
 RA Baldarelli R., Hill D.P., Bull C., Hume D.A., Quackebush J.,
 RA Schirral L.M., Kanagin A., Matsuda H., Batalov S., Beisel K.W.,
 RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
 RA Dalla E., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S.,
 RA Gaasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
 RA Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
 RA Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
 RA Kanagawa A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
 RA Maglott D.R., Maltrais L., Marchionni L., McKenzie L., Miki H.,
 RA Nagashima T., Numata K., Okido T., Pavan W.J., Pereira G., Pesole G.,
 RA Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramchandran S.,
 RA Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,
 RA Sanderlin A., Schneider C., Sempic C.A., Setou M., Shimada K.,
 RA Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
 RA Verardo R., Wagner L., Wehstedt C., Wang Y., Watanabe Y., Welle C.,
 RA Wilmink L.G., Wyszynski-Boris A., Yanagisawa M., Yang I., Yang L.,
 RA Yuan Z., Zavalan T., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
 RA Hirozane-Kishikawa T., Kono H., Nakamura M., Sakazume N., Sato K.,
 RA Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S.,
 RA Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,

RA Miyazaki A., Sakai K., Sasaki D., Shibata K., Shingawa A.,
 RA Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
 RA Birney E., Hayashizaki Y.;
 RT "Analysis of the mouse transcriptome based on functional annotation of
 RT 60,770 full-length cDNAs.";
 RL Nature 420:563-573(2002).
 RN [4]
 RN NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
 RC MEDLINE=223828257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RC STRAUSBERG R.L., FEINGOLD E.A., GROUSE L.H., DERGE J.G.,
 RA Krausner R.D., Collins F.S., Wagner L., Shennan C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Blencow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.L., Wang Y., Hsieh F.,
 RA Diatchenko L., Jordan K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M.J., Soares M.B., Bonaldi M.F., Cassavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Udell T.B., Toshiyuki S., Carninci P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullanbly S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Huliy S.W.,
 RA Villion D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Pahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Senterfild Y.S.N., Krzywiński M.I., Skalka U., Smalins D.E.,
 RA Schurch A., Schein J.E., Jones S.J.M., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences.";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 RN [5]
 RN FUNCTION OF GLP-1 AND GLP-1(7-36) AMIDE.
 RP PubMed=1886889;
 RA Fridolf T., Botcher G., Sundler F., Ahren B.;
 RT "GLP-1 and GLP-1(7-36) amide: influences on basal and stimulated
 RT insulin and glucagon secretion in the mouse.";
 RL Pancreas 6:208-215(1997).
 RN [6]
 RN PROCESSING BY PCSK1.
 RP PubMed=9407057; DOI=10.1074/jbc.272.52.32810;
 RA Roulle Y., Kentengwa S., Imringer J.C., Halban P.A.;
 RT "Role of the prohormone convertase PC3 in the processing of
 RT proglucagon to glucagon-like peptide 1.";
 RL J. Biol. Chem. 272:32810-32816(1997).
 RN [7]
 RN PROCESSING BY PCSK2.
 RP PubMed=11356850; DOI=10.1074/jbc.M103362200;
 RA Ruruta M., Zhou A., Webb G., Carroll R., Ravazzola M., Orci L.,
 RA Steiner D.F.;
 RT "Severe defect in proglucagon processing in islet A-cells of
 RT prohormone convertase 2 null mice.";
 RL J. Biol. Chem. 276:27197-27202(2001).
 RN [8]
 RN REVIEW.
 RP PubMed=12554744; DOI=10.1210/me.2002-0306;
 RA Drucker D.J.;
 RT "Glucagon-like peptides: regulators of cell proliferation,
 RT differentiation, and apoptosis.";
 RL Mol. Endocrinol. 17:161-171(2003).
 RN [9]
 RN REVIEW.
 RP PubMed=12626323; DOI=10.1152/ajpendo.00492.2002;
 RA Jiang G., Zhang B.B.;
 RT "Glucagon and regulation of glucose metabolism.";
 RL Am. J. Physiol. 284:E671-E678(2003).
 RN [10]
 RN REVIEW.
 RP PubMed=10322410;
 RA Drucker D.J.;
 RT "Glucagon-like peptide 2.";
 RL Trends Endocrinol. Metab. 10:153-156(1999).
 RN [11]
 RN REVIEW.

RX PubMed=10605628; DOI=10.1210/er.20.6.876;
 RA Kleffer T.J., Habener J.F.;
 RT "The glucagon-like peptides.";
 RL Endocr. Rev. 20:876-913(1999).
 CC -1- FUNCTION: Glucagon plays a key role in glucose metabolism and
 CC homeostasis. Regulates blood glucose by increasing glucogenesis
 CC and decreasing glycolysis. A counterregulatory hormone of insulin,
 CC raises plasma glucose levels in response to insulin-induced
 CC hypoglycemia (By similarity).
 CC -1- FUNCTION: GLP-1 is a potent stimulator of glucose-dependent
 CC insulin release. Play important roles on gastric motility and the
 CC suppression of plasma glucagon levels. May be involved in the
 CC suppression of satiety and stimulation of glucose disposal in
 CC peripheral tissues, independent of the actions of insulin. Have
 CC growth-promoting activities on intestinal epithelium. May also
 CC regulate the hypothalamic pituitary axis (HPA) via effects on LH,
 CC TSH, CRH, oxytocin, and vasopressin secretion. Increases islet
 CC mass through stimulation of islet neogenesis and pancreatic beta
 CC cell proliferation (By similarity).
 CC -1- FUNCTION: GLP-2 stimulates intestinal growth and up-regulates
 CC villus height in the small intestine, concomitant with increased
 CC crypt cell proliferation and decreased enterocyte apoptosis. The
 CC gastrointestinal tract, from the stomach to the colon is the
 CC principal target for GLP-2 action. Plays a key role in nutrient
 CC homeostasis, enhancing nutrient assimilation through enhanced
 CC gastrointestinal function, as well as increasing nutrient
 CC disposal. Stimulates intestinal glucose transport and decreases
 CC mucosal permeability (By similarity).
 CC -1- FUNCTION: Oxyntomodulin significantly reduces food intake (By
 CC similarity).
 CC -1- FUNCTION: Glucagon may modulate gastric acid secretion and
 CC gastro-pyloro-duodenal activity.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: Glucagon is secreted in the A cells of the
 CC islets of Langerhans. GLP-1, GLP-2, oxyntomodulin and glicentin
 CC are secreted from enteroendocrine cells throughout the
 CC gastrointestinal tract. GLP1 and GLP2 are also secreted in
 CC selected neurons in the brain.
 CC -1- INDUCTION: Glucagon release is stimulated by hypoglycemia and
 CC inhibited by hyperglycemia, insulin, and somatostatin. GLP-1 and
 CC GLP-2 are induced in response to nutrient ingestion (By
 CC similarity).
 CC -1- PTM: Proglucagon is posttranslationally processed in a tissue-
 CC specific manner in pancreatic A cells and intestinal L cells. In
 CC pancreatic A cells, the major bioactive hormone is glucagon
 CC cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1
 CC liberates GLP-1, GLP-2, glicentin and oxyntomodulin. GLP-1 is
 CC further N-terminally truncated by posttranslational processing in
 CC the intestinal L cells resulting in GLP-1(7-37) GLP-1-(7-36)amide.
 CC The C-terminal amidation is neither important for the metabolism
 CC of GLP-1 nor for its effects on the endocrine pancreas (By
 CC similarity).
 CC -1- SIMILARITY: Belongs to the glucagon family.
 CC
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 CC between the Swiss Institute of Bioinformatics and the EMBL outstation-
 CC CC the European Bioinformatics Institute. There are no restrictions on its
 CC use as long as its content is in no way modified and this statement is not
 CC removed.
 CC
 CC EMBL; Z46845; CA86902.1; -; mRNA.
 CC EMBL; AF276754; AA96898.1; -; mRNA.
 CC EMBL; AK007911; BAB25344.1; -; mRNA.
 CC EMBL; BC012975; AAH12975.1; -; mRNA.
 CC PIR; A57294; A57294.
 CC HSSP; P01275; 1D0R.
 CC EMBL; ENSMUSG0000000394; Mus musculus.
 CC MGI; MGI:95674; Gc9.
 CC GO; GO:0005615; C:extracellular space; TAS.
 CC InterPro; IPR000532; Glucagon.
 CC Pfam; PF00123; Hormone_2; 3.
 CC
 CC Query Match 52.4%; Score 243.5; DB 1; Length 180;

Best Local Similarity 43.5%; Pred. No. 1,4e-17; Matches 54; Conservative 13; Mismatches 20; Indels 37; Gaps 3;

OY 3 IPIPIFLFLSFFVGG-----LEHTRRG-----SLDKRKGEGTFTSDV 40
DB 4 IYFVAGLILMLVCGSMQHALLQDTEENRSPASQTEAHEDPDEMNEDKRRHSOGTFTSDV 63
OY 41 SYLEGOAAKEFIAMLVK-----GRRGEGTFTSDVSYLEGOAAKEFIAM 85
DB 64 KYLDSRRADQDFVQWLMNTKRNRNRIARHPDEFERHAGTFTSDVSYLEGOAAKEFIAM 123
OY 86 VKGR 89
DB 124 VKGR 127

RESULT 8
053TP6 HUMAN PRELIMINARY; PRT; 180 AA.

AC 13-SEP-2005 (TrEMBLrel. 31, Created)
DC 13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
DT 13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
DE Hypothetical protein GCG.
GN Name=GCG:
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homiidae;

OC Homo.
OX NCBI_TaxID=9606;
RN 1]
RP NUCLEOTIDE SEQUENCE.
RA Cotton M., Maupin R., Hawkins M., Harkins R.;
RT "The sequence of Homo sapiens BAC clone RP11-576116."
RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.

RN 2]
RP NUCLEOTIDE SEQUENCE.
RA Waterston R.H.;
RL Submitted (OCT-1999) to the EMBL/GenBank/DBJ databases.
RN 3]
RP NUCLEOTIDE SEQUENCE.
RA Waterston R.;

RL Submitted (OCT-2000) to the EMBL/GenBank/DBJ databases.
RN 4]
RP NUCLEOTIDE SEQUENCE.
RA Wilson R.K.;
RL Submitted (APR-2005) to the EMBL/GenBank/DBJ databases.
DR EMBL: AC007750; AAY24204.1; -; Genomic_DNA.
KM Hypothetical protein.
SQ SEQUENCE 180 AA; 20909 MW; 7A999BEC629B2862C CRC64;

Query Match 52.4%; Score 243.5; DB 2; Length 180;
Best Local Similarity 42.4%; Pred. No. 1.4e-17;
Matches 53; Conservative 15; Mismatches 20; Indels 37; Gaps 3;

OY 2 NIPITPLFLSFFVGG-----LEHTRRG-----SLDKRKGEGTFTSDV 39
DB 3 SIYFVAGLILMLVCGSMQHALLQDTEENRSPASQADPLSDPDQWNEKRRHSOGTFTSDY 62
OY 40 SYLEGOAAKEFIAMLVK-----GRRGEGTFTSDVSYLEGOAAKEFIAM 84
DB 63 SKYLDSSRRADQDFVQWLMNTKRNRNRIARHPDEFERHAGTFTSDVSYLEGOAAKEFIAM 122
OY 85 VKGR 89
DB 123 VKGR 127

RESULT 9
GLUC_HUMAN STANDARD; PRT; 180 AA.
AC P01275;
DT 21-JUL-1986 (Rel. 01, Created)

DT 29-MAR-2004 (Rel. 43, Last sequence update)
DT 13-SEP-2005 (Rel. 48, Last annotation update)
DE Glucagon precursor [Contins: Glucantin; Glucantin-related polypeptide
DE (GRPp); Oryzomodulin (OXY) (OKM); Glucagon; Glucagon-like peptide 1
DE (GLP-1); Glucagon-like peptide 1(7-37) (GLP-1(7-37)); Glucagon-like
DE peptide 1(7-36) (GLP-1(7-36)); Glucagon-like peptide 2 (GLP-2)].
GN Name=GCG;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homiidae;
OC Homo.
OX NCBI_TaxID=9606;
RN 1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=88330860; PubMed=2901414;
RA Drucker D.J., Asa S.;
RT "Glucagon gene expression in vertebrate brain."
RL J. Biol. Chem. 263:13475-13478(1988).
RN 2]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=86259053; PubMed=3725587;
RA White J.W., Saunders G.F.;
RT "Structure of the human glucagon gene."
RL Nucleic Acids Res. 14:4719-4730(1986).
RN 3]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Liver;
RX MEDLINE=83271477; PubMed=6877358;
RA Bell G.I., Sanchez-Pescador R., Laybourn P.J., Najarian R.C.;
RT "Exon duplication and divergence in the human preproglucagon gene."
RL Nature 304:368-371(1983).
RN 4]
RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RA Kalline N., Chen X., Rolfe A., Halleck A., Hines L., Eisenstein S.,
RA Koundinya M., Raphael J., Moreira D., Kelley T., Labaer J., Lin Y.,
RA Pheasant M., Farmer A.;
RT "Cloning of human full-length cDNAs in BD Creator(TM) system donor
RT vector."
RL Submitted (MAY-2003) to the EMBL/GenBank/DBJ databases.
RN 5]
RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RC TISSUE=Pancreas;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strauberg R.L., Feinold E.A., Grouse L.H., Derge J.G.;
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.T., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udell T.B., Toshiyuki S., Carninci P., Muliyil S.J.,
RA Raha S.S., Lognani N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
RA Bosak S.A., McGowan P.U., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Wosley K.C., Hale S., Garcia A.M., Gay L.J., Hulik S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahy J., Hellon E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakeley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butcherfield Y.S.N., Krzywinski M.T., Skalska U., Smallus D.E.,
RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences."
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN 6]
RP PROTEIN SEQUENCE OF 53-81.
RX PubMed=11946536;
RA Thomsen J., Kristiansen K., Brunfeldt K., Sundby F.;
RT "The amino acid sequence of human glucagon."
RL FEBS Lett. 21:315-319(1972).
RN 17]
RP PROTEIN SEQUENCE OF 98-127.
RX MEDLINE=89327238; PubMed=2753890;
RA Orskov C., Bersani M., Johnsen A.H., Hoerjrup P., Holst J.J.;

DE (GRPP): Oxyntomodulin (Oxy) (OXM); Glucagon; Glucagon-like peptide 1
 DE (GLP-1); Glucagon-like peptide 1(7-37) (GLP-1(7-37)); Glucagon-like
 DE peptide-1(7-36) (GLP-1(7-36)); Glucagon-like peptide 2 (GLP-2)].
 GN Name=Cg3;
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
 OC Muridae; Muridae; Murinae; Rattus.
 OX NCBI_TaxID=101116;
 RN [1]
 RN NUCLEOTIDE SEQUENCE.
 RA MEDLINE=85054853; PubMed=6094539;
 RA Heinrich G., Gros P., Habener J.F.;
 RT "Glucagon gene sequence. Four of six exons encode separate functional
 RT domains of rat pre-proglucagon.";
 RL J. Biol. Chem. 259:14082-14087(1984).
 RN [2]
 RN NUCLEOTIDE SEQUENCE.
 RA MEDLINE=85051023; PubMed=6548696;
 RA Heinrich G., Gros P., Lund P.K., Bentley R.C., Habener J.F.;
 RT "Pre-proglucagon messenger ribonucleic acid: nucleotide and encoded
 RT amino acid sequences of the rat pancreatic complementary
 RT deoxyribonucleic acid.";
 RL Endocrinology 115:2176-2181(1984).
 RN [3]
 RN NUCLEOTIDE SEQUENCE.
 RA MEDLINE=8630324; PubMed=3528148;
 RA Mojsov S., Heinrich G., Wilson I.B., Ravazzola M., Orci L.,
 RA Habener J.F.;
 RT "Preproglucagon gene expression in pancreas and intestine diversifies
 RT at the level of post-translational processing.";
 RL J. Biol. Chem. 261:11880-11889(1986).
 RN [4]
 RN PROTEIN SEQUENCE OF 53-89.
 RA MEDLINE=95023911; PubMed=7937770;
 RA Collie N.L., Walsh J.H., Wong H.C., Shively J.E., Davis M.T.,
 RA Lee T.D., Reeve J.R., Jr.;
 RT "Purification and sequence of rat oxyntomodulin.";
 RL Proc. Natl. Acad. Sci. U.S.A. 91:9362-9366(1994).
 RN [5]
 RN FUNCTION OF OXYNTOMODULIN.
 RA MEDLINE=21448403; PubMed=1156480; DOI=10.1210/en.142.10.4244;
 RA Dakin C.L., Gunn I., Small C.J., Edwards C.M., Hay D.L., Smith D.M.,
 RA Ghatei M.A., Bloom S.R.;
 RT "Oxyntomodulin inhibits food intake in the rat.";
 RL Endocrinology 142:4244-4250(2001).
 RN [6]
 RN PROCESSING BY PCSK1 AND PCSK2.
 RA MEDLINE=86282838; PubMed=8721980; DOI=10.1210/me.10.4.342;
 RA Dhanvantari S., Seidah N.G., Brubaker P.L.;
 RT "Role of prohormone convertases in the tissue-specific processing of
 RT proglucagon.";
 RL Mol. Endocrinol. 10:342-355(1996).
 RN [7]
 RN TISSUE SPECIFICITY.
 RA MEDLINE=90243673; PubMed=1692320;
 RA Mojsov S., Kopiczynski M.G., Habener J.F.;
 RT "Both amidated and nonamidated forms of glucagon-like peptide I are
 RT synthesized in the rat intestine and the pancreas.";
 RL J. Biol. Chem. 265:8001-8008(1990).
 RN [8]
 RN REVIEW.
 RA PubMed=14719035; DOI=10.1139/y03-107;
 RA Brubaker P.L., Anni Y.;
 RT "Direct and indirect mechanisms regulating secretion of glucagon-like
 RT peptide-1 and glucagon-like peptide-2.";
 RL Can. J. Physiol. Pharmacol. 81:1005-1012(2003).
 RN [9]
 RN REVIEW.
 RA MEDLINE=22442611; PubMed=12554744; DOI=10.1210/me.2002-0306;
 RA Drucker D.J.;
 RT "Glucagon-like peptides: regulators of cell proliferation,
 RT differentiation, and apoptosis.";

RL Mol. Endocrinol. 17:161-171(2003).
 RN [10]
 RN REVIEW.
 RA MEDLINE=22513095; PubMed=12626223; DOI=10.1152/ajpendo.00492.2002;
 RX Jiang G., Zhang B.B.;
 RT "Glucagon and regulation of glucose metabolism.";
 RL Am. J. Physiol. 284:E671-E678(2003).
 RN [11]
 RN REVIEW.
 RA PubMed=10322410;
 RA Drucker D.J.;
 RT "Glucagon-like peptide 2.";
 RL Trends Endocrinol. Metab. 10:153-156(1999).
 RN [12]
 RN REVIEW.
 RA MEDLINE=20073561; PubMed=10605628; DOI=10.1210/er.20.6.876;
 RA Kieffer T.J., Habener J.F.;
 RT "The glucagon-like peptides.";
 RL Endocr. Rev. 20:876-913(1999).
 CC -1- FUNCTION: Glucagon plays a key role in glucose metabolism and
 CC homeostasis. Regulates blood glucose by increasing gluconeogenesis
 CC and decreasing glycolysis. A counterregulatory hormone of insulin,
 CC raises plasma glucose levels in response to insulin-induced
 CC hypoglycemia. Plays an important role in initiating and
 CC maintaining hyperglycemic conditions in diabetes.
 CC -1- FUNCTION: GLP-1 is a potent stimulator of glucose-dependent
 CC insulin release. Play important roles on gastric motility and the
 CC suppression of plasma glucagon levels. May be involved in the
 CC peripheral tissues, independent of the actions of insulin. Have
 CC growth-promoting activities on intestinal epithelium. May also
 CC regulate the hypothalamic pituitary axis (HPA) via effects on LH,
 CC TSH, CRH, oxytocin, and vasopressin secretion. Increases islet
 CC mass through stimulation of islet neogenesis and pancreatic beta
 CC cell proliferation. Inhibits beta cell apoptosis.
 CC -1- FUNCTION: GLP-2 stimulates intestinal growth and up-regulates
 CC villus height in the small intestine, concomitant with increased
 CC crypt cell proliferation and decreased enterocyte apoptosis. The
 CC gastrointestinal tract, from the stomach to the colon is the
 CC principal target for GLP-2 action. Plays a key role in nutrient
 CC homeostasis, enhancing nutrient assimilation through enhanced
 CC gastrointestinal function, as well as increasing nutrient
 CC disposal. Stimulates intestinal glucose transport and decreases
 CC mucosal permeability.
 CC -1- FUNCTION: Oxyntomodulin significantly reduces food intake.
 CC gastro-pyloro-duodenal activity.
 CC -1- FUNCTION: Glucagon may modulate gastric acid secretion and the
 CC SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: Glucagon is secreted in the A cells of the
 CC islets of Langerhans. GLP-1, GLP-2, oxyntomodulin and glicentin
 CC are secreted from enteroendocrine cells throughout the
 CC gastrointestinal tract.
 CC -1- INDUCTION: Glucagon release is stimulated by hypoglycemia and
 CC inhibited by hyperglycemia, insulin, and somatostatin. GLP-1 and
 CC GLP-2 are induced in response to nutrient ingestion.
 CC -1- PTM: Proglucagon is posttranslationally processed in a tissue-
 CC specific manner in pancreatic A cells and intestinal L cells. In
 CC pancreatic A cells, the major bioactive hormone is glucagon
 CC cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1
 CC liberates GLP-1, GLP-2, glicentin and oxyntomodulin. GLP-1 is
 CC further N-terminally truncated by posttranslational processing in
 CC the intestinal L cells resulting in GLP-1(7-37) GLP-1-(7-36)amide.
 CC The C-terminal amidation is neither important for the metabolism
 CC of GLP-1 nor for its effects on the endocrine pancreas.
 CC -1- SIMILARITY: Belongs to the glucagon family.
 CC
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 CC removed.
 DR EMBL; K02813; AAA41235.1; -; Genomic_DNA.

DR EMBL; K02809; AAA41235.1; JOINED; Genomic_DNA.
 DR EMBL; K02810; AAA41235.1; JOINED; Genomic_DNA.
 DR EMBL; K02811; AAA41235.1; JOINED; Genomic_DNA.
 DR EMBL; K02812; AAA41235.1; JOINED; Genomic_DNA.
 DR PIR; A22655; GCRT.
 DR HSSP; P01275; IDOR.
 DR Ensemble; ENSRNCG000005498; Rattus norvegicus.
 DR RGD; 2668; Gcγ.
 DR GO; GO:0005179; F: hormone activity; TAS.
 DR GO; GO:0019538; P: protein metabolism; TAS.
 DR GO; GO:0006109; P: regulation of carbohydrate metabolism; TAS.
 DR GO; GO:0019216; P: regulation of lipid metabolism; TAS.
 DR InterPro; IPR000532; Glucagon.
 DR Pfam; PF0123; Hormone 2; 3.
 DR PRINTS; PR00275; GLUCAGON.
 DR PROSITE; PS00260; GLUCAGON; 4.
 KW Amidation; Cleavage on pair of basic residues;
 KW Direct protein sequencing; Glucagon family; Hormone; Signal.
 FT SIGNAL 1 20
 FT PEPIDE 21 89 Glucenin (By similarity).
 FT PEPIDE 21 50 Glycenin-related polypeptide (By
 FT PEPIDE 53 89 similarity).
 FT PROPEP 84 81 Oxyntomodulin.
 FT PEPIDE 92 128 Glucagon (By similarity).
 FT PEPIDE 98 128 Glucagon-like peptide 1 (By similarity).
 FT PEPIDE 98 128 Glucagon-like peptide 1 (7-37) (By
 FT PEPIDE 98 127 similarity).
 FT PROPEP 131 145 Glucagon-like peptide 1 (7-36) (By
 FT PEPIDE 146 178 similarity).
 FT PEPIDE 52 53 By similarity.
 FT SITE 83 84 Glucagon-like peptide 2 (By similarity).
 FT SITE 91 92 Glucagon-like peptide 2 (By similarity).
 FT SITE 97 98 Cleavage (by PCSK1) (By similarity).
 FT SITE 130 131 Cleavage (by PCSK1) (By similarity).
 FT SITE 145 146 Cleavage (by PCSK1) (By similarity).
 FT MOD_RES 127 127 Arginine amide (G-128 provides amide
 FT SEQUENCE 180 AA; 20846 MW; 76931409D03C7978 CRC64;
 Query Match 51.9%; Score 241.5; DB 1; Length 180;
 Best Local Similarity 60.3%; Pred. No. 2.3e-17;
 Matches 47; Conservative 7; Mismatches 9; Indels 15; Gaps 1;
 QY 27 DKRHGEGTPTSDVSSYLEGQAKKRIAWLVK-----GRHGEPTSDVSS 71
 DB 50 DKRHSQGTPTSDYSKYLDYKSRRAQDFVQMLNMTKRNNRNNAKRHDDERFHAEGTPTSDVSS 109
 QY 72 YLEGQAARERIAWLVKGR 89
 DB 110 YLEGQAARERIAWLVKGR 127
 RESULT 11
 GLUC_CAVPO STANDARD; PRT; 180 AA.
 AC P05110;
 DT 13-AUG-1987 (Rel. 05, Created)
 DT 13-AUG-1987 (Rel. 05, Last sequence update)
 DT 13-SEP-2005 (Rel. 48, Last annotation update)
 DE Glucagon precursor [Contains: Glucenin; Glycenin-related polypeptide
 DE (GRP-1); Oxyntomodulin (OXY) (OKM); Glucagon; Glucagon-like peptide 1
 DE (GRP-1); Glucagon-like peptide 1 (7-37)]; Glucagon-like peptide 1
 DE Peptide 1 (7-36) (GRP-1(7-36)); Glucagon-like peptide 2 (GRP-2)].
 GN Name=CG;
 OS Cavia porcellus (Guinea pig).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
 OC Hystricognathi; Caviidae; Cavia.
 OC NCBI_TaxID=10141;

RA [1]
 RP NUCLEOTIDE SEQUENCE.
 RX MEDLINE=86248118; PubMed=3755107; DOI=10.1016/0014-5793(86)81429-6;
 RA Seine S., Welsh M., Bell G.I., Chan S.J., Steiner D.F.;
 RT "Mutations in the guinea pig preproglucagon gene are restricted to a
 RT specific portion of the prohormone sequence.";
 RL FEBS Lett. 203:25-30(1986).
 RL [2]
 RP PROTEIN SEQUENCE OF 53-81.
 RX MEDLINE=86165412; PubMed=3956884;
 RA Huang C.G., Eng J., Pan Y.-C.E., Hulmes J.D., Yalow R.S.;
 RT "Guinea pig glucagon differs from other mammalian glucagons.";
 RL Diabete 33:508-512(1986).
 RP PARTIAL PROTEIN SEQUENCE OF 53-89.
 RX MEDLINE=86017849; PubMed=4048553; DOI=10.1016/0167-0115(85)90203-4;
 RA Conlon J.M., Hansen H.F., Schwartz T.W.;
 RT "Primary structure of glucagon and a partial sequence of oxyntomodulin
 RT (glucagon-37) from the guinea pig.";
 RL Regul. Pept. 11:309-320(1985).
 RL [4]
 RP REVIEW.
 RX MEDLINE=22442611; PubMed=12554744; DOI=10.1210/me.2002-0306;
 RA Drucker D.J.;
 RT "Glucagon-like peptides: regulators of cell proliferation,
 RT differentiation, and apoptosis.";
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 RL [5]
 RP REVIEW.
 RX MEDLINE=22513095; PubMed=12626323; DOI=10.1152/ajpendo.00492.2002;
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 RT "Glucagon and regulation of glucose metabolism.";
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 RL [6]
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 RX PubMed=10322410;
 RA Drucker D.J.;
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 RL Trends Endocrinol. Metab. 10:153-156(1999).
 RL [7]
 RP REVIEW.
 RX MEDLINE=20073561; PubMed=10605628; DOI=10.1210/er.20.6.876;
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 RT "The glucagon-like peptides.";
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 CC homeostasis. Regulates blood glucose by increasing gluconeogenesis
 CC and decreasing glycolysis. A counterregulatory hormone of insulin,
 CC raises plasma glucose levels in response to insulin-induced
 CC hypoglycemia (By similarity).
 CC -1- FUNCTION: GIP-1 is a potent stimulator of glucose-dependent
 CC insulin release. Play important roles on gastric motility and the
 CC suppression of satiety and stimulation of glucose disposal in
 CC peripheral tissues, independent of the actions of insulin. Have
 CC growth-promoting activities on intestinal epithelium. May also
 CC regulate the hypothalamic pituitary axis (HPA) via effects on LH,
 CC TSH, CRH, oxytocin, and vasopressin secretion. Increases islet
 CC mass through stimulation of islet neogenesis and pancreatic beta
 CC cell proliferation (By similarity).
 CC -1- FUNCTION: GIP-2 stimulates intestinal growth and up-regulates
 CC villus height in the small intestine, concomitant with increased
 CC crypt cell proliferation and decreased enterocyte apoptosis. The
 CC gastrointestinal tract, from the stomach to the colon is the
 CC principal target for GIP-2 action. Plays a key role in nutrient
 CC homeostasis, enhancing nutrient assimilation through enhanced
 CC gastrointestinal function, as well as increasing nutrient
 CC disposal. Stimulates intestinal glucose transport and decreases
 CC mucosal permeability (By similarity).
 CC -1- FUNCTION: Oxyntomodulin significantly reduces food intake (By
 CC similarity).
 CC -1- FUNCTION: Glucenin may modulate gastric acid secretion and
 CC gastro-pyloro-duodenal activity (By similarity).

CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- INDUCTION: Glucagon release is stimulated by hypoglycemia and
 CC inhibited by hyperglycemia, insulin, and somatostatin. GLP-1 and
 CC GLP-2 are induced in response to nutrient ingestion (By
 CC similarity).
 CC -1- PFM: Proglucagon is posttranslationally processed in a tissue-
 CC specific manner in pancreatic A cells and intestinal L cells. In
 CC pancreatic A cells, the major bioactive hormone is glucagon
 CC cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1
 CC liberates GLP-1, GLP-2, glicentin and oxyntomodulin. GLP-1 is
 CC further N-terminally truncated by posttranslational processing in
 CC the intestinal L cells resulting in GLP-1(7-37) GLP-1-(7-36)amide.
 CC The C-terminal amidation is neither important for the metabolism
 CC of GLP-1 nor for its effects on the endocrine pancreas (By
 CC similarity).
 CC -1- SIMILARITY: Belongs to the glucagon family.

AC Q6RYB2;
 DT 05-JUL-2004 (TrEMBLrel. 27, Created)
 DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
 DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
 DE Proglucagon (Fragment).
 OS Bulo marinus (Giant toad) (Gnate toad).
 CC Eukaryota; Metazoa; Chordata; Cranialata; Vertebrata; Euteleostomi;
 CC Amphibia; Batrachia; Anura; Neobatrachia; Hylidoidea; Bufonidae; Bulo.
 OX NCBI_TaxID=8386;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RA TISSUE=Intestine;
 RC Busby E.R., Brown G.D., Mommgen T.P.;
 RL Submitted (NOV-2003) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AY485819; AAS57655.1; -; mRNA.
 DR GO: 0005576; C:extracellular region; IEA.
 DR GO: 0005179; F:hormone activity; IEA.
 DR InterPro: IPR000532; Glucagon.
 DR Pfam: PF00123; Hormone 2; 3.
 DR SMART: SM00070; GLUCA; 3.
 DR PROSITE: PS00260; GLUCAGON; 3.
 FT NON_TER 1 1
 SQ SEQUENCE 149 AA; 17322 MW; 2F99199A0778B8AF CRC64;

DR EMBL: D00014; BAA0010.1; -; mRNA.
 DR PIR: A24856; GCGP.
 DR HSBP; P01275; IDOR.
 DR InterPro: IPR000532; Glucagon.
 DR Pfam: PF00123; Hormone 2; 3.
 DR PRINTS: PR00275; GLUCAGON.
 DR PROSITE: PS00260; GLUCAGON; 4.
 KW Amidation; Cleavage on pair of basic residues;
 KW Direct protein sequencing; Glucagon family; Hormone; Signal.
 FT SIGNAL 1 20
 FT PEPYD 21 89
 FT PEPYD 21 50
 FT PEPYD 53 89
 FT PEPYD 53 81
 FT PROPEP 84 89
 FT PEPYD 92 128
 FT PEPYD 98 128
 FT PEPYD 98 127
 FT PROPEP 131 145
 FT PEPYD 146 178
 FT SITE 52 53
 FT SITE 83 84
 FT SITE 91 92
 FT SITE 97 98
 FT SITE 130 131
 FT SITE 145 146
 FT MOD_RES 127 127
 SQ SEQUENCE 180 AA; 20972 MW; 702FB181161D2776 CRC64;

Query Match 51.2%; Score 238; DB 2; Length 149;
 Best Local Similarity 51.6%; Pred. No. 4,4e-17;
 Matches 47; Conservative 16; Mismatches 14; Indels 14; Gaps 2;
 QY 13 FVGGLEHTRRGSLDK-----RHGSGTFTSDVSSYLEGQAARKEFIAMLVKGR----- 58
 DB 2 FAQWLMMSSKSSGGGSRNNVQFERRHAGETIYNDVYQFLBEKAAKPEFDWLKGIIPKQRSL 61
 DB 59 RHGSGTFTSDVSSYLEGQAARKEFIAMLVKGR 89
 DB 62 RHAGSGTFTSDVTSFLBEKAAKPEFDWLKGR 92

Query Match 51.7%; Score 240.5; DB 1; Length 180;
 Best Local Similarity 60.3%; Pred. No. 3e-17;
 Matches 47; Conservative 7; Mismatches 9; Indels 15; Gaps 1;
 QY 27 DKRRHGGTFTSDVSSYLEGQAARKEFIAMLVK-----GHRGSGTFTSDVSS 71
 DB 50 DKRRHGGTFTSDVSSYLEGQAARKEFIAMLVKRRNNIARRHDFEHRHARGTFTSDVSS 109
 QY 72 YLEGQAARKEFIAMLVKGR 89
 DB 110 YLEGQAARKEFIAMLVKGR 127

RESULT 13
 ID GDUCL_XENIA STANDARD; PRT; 266 AA.
 AC 042143;
 DT 28-FEB-2003 (Rel. 41, Created)
 DT 28-FEB-2003 (Rel. 41, Last sequence update)
 DT 10-MAY-2005 (Rel. 47, Last annotation update)
 DE Glucagon I precursor (contains: Glucagon; Glucagon-like peptide 1A
 DE (GLP-1A); Glucagon-like peptide 1B (GLP-1B); Glucagon-like peptide 1C
 DE (GLP-1C); Glucagon-like peptide 2 (GLP-2)).
 OS Xenopus laevis (African clawed frog).
 CC Eukaryota; Metazoa; Chordata; Cranialata; Vertebrata; Euteleostomi;
 CC Amphibia; Batrachia; Anura; Mesobatrachia; Pipidoidea; Pipidae;
 CC Xenopodinae; Xenopus; Xenopus.
 OX NCBI_TaxID=8355;
 RN [1]
 RP NUCLEOTIDE SEQUENCE, AND ALTERNATIVE SPLICING.
 RA TISSUE=Pancreas;
 RC MEDLINE=97368292; Pubmed=9223287; DOI=10.1073/pnas.94.15.7915;
 RA Irwin D.M., Satkunaratjah M., Wen Y., Brubaker P.L., Pederson R.A.,
 RA Wheelier M.B.;
 RT "The Xenopus proglucagon gene encodes novel GLP-1-like peptides with
 RT insulinotropic properties.";
 RL Proc. Natl. Acad. Sci. U.S.A. 94:7915-7920(1997).
 CC -1- FUNCTION: Promotes hydrolysis of glycogen and lipids, and raises
 CC the blood sugar level.
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- ALTERNATIVE PRODUCTS:
 CC Event=Alternative splicing; Named isoforms=2;
 CC Name=1;
 CC Name=2;
 CC IsoId=042143-1; Sequence=Displayed;
 CC Name=3;
 CC IsoId=042143-2; Sequence=VSP_001755;
 CC -1- SIMILARITY: Belongs to the glucagon family.
 CC -----
 CC This Swiss-Prot entry is copyright. It is produced through a collaboration

CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use as long as its content is in no way modified and this statement is not
CC removed.

DR EMBL; AF004432; AAB65660.1; -: mRNA.

DR HSSP; P01274; 1GCN.

DR InterPro; IPR000532; Glucagon.

DR Pfam; PF00123; Hormone 2; 5.

DR PRINTS; PR00275; GLUCAGON.

DR PROSITE; PS00250; GLUCAGON; 5.

KW Alternative splicing; Cleavage on pair of basic residues;

KM Glucagon family; Hormone; Multigene family; Signal.

FT SIGNAL 1 20 Potential.

FT PROPP 21 50 Glucagon.

FT PROPP 53 81 Glucagon.

FT PROPP 84 95 Glucagon-like peptide 1A.

FT PEPTIDE 97 133 Glucagon-like peptide 1A.

FT PROPP 136 140 Glucagon-like peptide 1B.

FT PEPTIDE 142 172 Glucagon-like peptide 1B.

FT PROPP 175 178 Glucagon-like peptide 1C.

FT PROPP 180 210 Glucagon-like peptide 1C.

FT PEPTIDE 213 224 Glucagon-like peptide 2.

FT PROPP 227 259 Glucagon-like peptide 2.

FT PROPP 261 266 Glucagon-like peptide 2.

FT VARSPLIC 214 261 Missing (in isoform 2).

SO SEQUENCE 266 AA; 30951 MW; 544PFBBC20AP872C CRC64;

Query Match 51.2%; Score 238; DB 1; Length 266;

Best Local Similarity 57.9%; Pred. No. 8.3e-17;

Matches 44; Conservative 14; Mismatches 10; Indels 8; Gaps 1;

QY 22 RRGSLDKRHRGEGFTSDVSYLGGQAQAKRFIAMLVKG-----RHGEGFTSDVSYL

DB 134 RRVAVRERHAEVGTITNDVTEYLEKAKKEFIEMWLKSKPKIRYSHRAGTFTINDMTNYL

QY 74 EQQAQAKRFIAMLVYGR 89

DB 194 EERKAKEFVGLTKGR 209

RESULT 14

Q6D1Z4 XENTR PRELIMINARY; PRT; 266 AA.

ID G6D1Z4 XENTR PRELIMINARY; PRT; 266 AA.

AC G6D1Z4_ 25-OCT-2004 (TREMBlrel. 28, Created)

DT 25-OCT-2004 (TREMBlrel. 28, Last sequence update)

DT 25-OCT-2004 (TREMBlrel. 28, Last annotation update)

DE Glucagon.

GN Name=gcg-prov;

OS Xenopus tropicalis (Western clawed frog) (Silurana tropicalis).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipidoidea; Pipidae;

OC Xenopodidae; Xenopus; Silurana.

OX NCBI_TaxID=8364;

RN [1]

RP NUCLEOTIDE SEQUENCE.

RC TISSUE=Whole body;

RX MEDLINE=23388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RA Altshuler S.F., Zeeberg B., Bluetow K.H., Schaefer C.F., Bhat N.K.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heieh F.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Brownstein M.J., Udell T.B., Toshiyuki S., Carninci P., Prange C.,

RA Raha S.S., Loguigliano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,

RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.U., Huylk S.W.,

RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs K.A.,

RA Fahy J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,

RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

RA Butterfield Y.S.N., Krzywicki M.I., Skalska U., Smallus D.E.,

RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;

RT "Generation and initial analysis of more than 15,000 full-length human

and mouse cDNA sequences";

Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).

RN [2]

RP NUCLEOTIDE SEQUENCE.

RC TISSUE=Whole body;

RA Klein S., Gerhard D.S.;

RL Submitted (JUN-2004) to the EMBL/GenBank/DBJ databases.

DR EMBL; BC075391; AAM75391.1; -: mRNA.

DR GO; GO:0005576; Cytochrome oxidase complex; IBA.

DR GO; GO:0005179; Hormone activity; IBA.

DR InterPro; IPR000532; Glucagon.

DR Pfam; PF00123; Hormone 2; 5.

DR PRINTS; PR00275; GLUCAGON.

DR SMART; SM00070; GLUCA; 5.

DR PROSITE; PS00250; GLUCAGON; 5.

DR PROSITE; PS00250; GLUCAGON; 5.

DR PROSITE; PS00250; GLUCAGON; 5.

DR PROSITE; PS00250; GLUCAGON; 5.

DR PROSITE; PS00250; GLUCAGON; 5.

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DR PROSITE; PS00250; GLUCAGON; 5.

DR PROSITE; PS00250; GLUCAGON; 5.

DR PROSITE; PS00250; GLUCAGON; 5.

DR PROSITE; PS00250; GLUCAGON; 5.

RN [4]
 RP REVIEW
 RA PubMed:10322410;
 RA Drucker D.J.;
 RT "Glucagon-like peptide 2.";
 RL Trends Endocrinol. Metab. 10:153-156(1999).
 RN [5]
 RP REVIEW
 RA PubMed:10605628; DOI=10.1210/er.20.6.876;
 RA Kletter T.J.; Habener J.F.;
 RT "The glucagon-like peptidease.";
 RL Endocr. Rev. 20:876-913(1999).
 CC -1- FUNCTION: Glucagon plays a key role in glucose metabolism and homeostasis. Regulates blood glucose by increasing gluconeogenesis and decreasing glycolysis. A counterregulatory hormone of insulin, raises plasma glucose levels in response to insulin-induced hypoglycemia (By similarity).
 CC -1- FUNCTION: GLP-1 is a potent stimulator of glucose-dependent insulin release. Play important roles on gastric motility and the suppression of satiety and stimulation of glucose disposal in peripheral tissues, independent of the actions of insulin. Have growth-promoting activities on intestinal epithelium. May also regulate the hypothalamic pituitary axis (HPA) via effects on LH, TSH, CRH, oxytocin, and vasopressin (By similarity).
 CC -1- FUNCTION: GLP-2 stimulates intestinal growth and up-regulates villus height in the small intestine, concomitant with increased crypt cell proliferation and decreased enterocyte apoptosis. The gastrointestinal tract, from the stomach to the colon is the principal target for GLP-2 action. Plays a key role in nutrient homeostasis, enhancing nutrient assimilation through enhanced gastrointestinal function, as well as increasing nutrient disposal. Stimulates intestinal glucose transport and decreases mucosal permeability (By similarity).
 CC -1- FUNCTION: Glucagonin may modulate gastric acid secretion and gastro-pyloro-duodenal activity (By similarity).
 CC -1- SUBCELLULAR LOCATION: Secreted.
 CC -1- TISSUE SPECIFICITY: Glucagon is secreted in the A cells of the islets of Langerhans. GLP-1, GLP-2, oxyntomodulin and glicentin are secreted from enteroendocrine cells throughout the gastrointestinal tract. GLP1 and GLP2 are also secreted in selected neurons in the brain.
 CC -1- INDUCTION: Glucagon release is stimulated by hypoglycemia and inhibited by hyperglycemia, insulin, and somatostatin. GLP-1 and GLP-2 are induced in response to nutrient ingestion (By similarity).
 CC -1- PTM: Proglucagon is posttranslationally processed in a tissue-specific manner in pancreatic A cells and intestinal L cells. In pancreatic A cells, the major bioactive hormone is glucagon cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1 liberates GLP-1, GLP-2, glicentin and oxyntomodulin. GLP-1 is further N-terminally truncated by posttranslational processing in the intestinal L cells resulting in GLP-1(7-37) GLP-1(7-36)amide. The C-terminal amidation is neither important for the metabolism of GLP-1 nor for its effects on the endocrine pancreas (By similarity).
 CC -1- SIMILARITY: Belongs to the glucagon family.
 CC -----
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 CC -----
 DR EMBL: M57688; AAA40588.1; -; mRNA.
 DR PIR: C36118; GCRTDU.
 DR HSSP: P01275; IDOR.
 DR InterPro: IPR000532; Glucagon.
 DR Pfam: PF00123; Hormone_2; 3.
 DR PRINTS: PR00275; GLUCAGON.
 DR PROSITE: PS00260; GLUCAGON; 4.
 KW Amidation; Cleavage on pair of basic residues; Glucagon family; Hormone; Signal.

FT	SIGNAL	1	20	
FT	PEPTIDE	21	89	Glicentin (By similarity).
FT	PEPTIDE	50	109	Glicentin-related polypeptide (By similarity).
FT	PEPTIDE	53	89	Oxyntomodulin (By similarity).
FT	PEPTIDE	53	81	Glucagon (By similarity).
FT	PROPEP	84	89	By similarity.
FT	PEPTIDE	92	128	Glucagon-like peptide 1 (By similarity).
FT	PEPTIDE	96	128	Glucagon-like peptide 1(7-37) (By similarity).
FT	PEPTIDE	98	127	Glucagon-like peptide 1(7-36) (By similarity).
FT	PROPEP	131	145	By similarity.
FT	PEPTIDE	146	178	Glucagon-like peptide 2 (By similarity).
FT	SITE	52	53	Cleavage (by PCSK2) (By similarity).
FT	SITE	83	84	Cleavage (by PCSK1 and PCSK2) (By similarity).
FT	SITE	91	92	Cleavage (by PCSK1) (By similarity).
FT	SITE	97	98	Cleavage (by PCSK1) (By similarity).
FT	SITE	130	131	Cleavage (by PCSK1) (By similarity).
FT	SITE	145	146	Cleavage (by PCSK1) (By similarity).
FT	MOD_RBS	127	127	Arginine amide (G-128 provides amide group) (By similarity).
FT	SEQUENCE	180 AA;	21166 MW;	6E8836160A9A3051 CRC64;
SQ				
Query Match		49.64;	Score 230.5;	DB 1; Length 180;
Best Local Similarity		59.04;	Pred. No. 3,3e-16;	
Matches	46;	Conservative	7;	Mismatches 10; Indels 15; Gaps 1;
Qy	27 DKRHGEGTFTSDVSSYLEGQAAKEFIAWLVK-----GRHGEGTFTSDVSS	71		
Db	50 DKRHSGQTFPSDYSKFLDTRRAQDFLDLWLNKTRKRNRIANRRHDFERFHAEGTFTSDVSS	109		
Qy	72 YLRGQAQKERIAMLVYKGR 89			
Db	110 YLRGQAQKERIAMLVYKGR 127			

Search completed: April 19, 2006, 12:08:52
 Job time : 24.5142 secs

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GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: April 19, 2006, 12:09:12 ; Search time 5.62571 Seconds
(without alignments)
1307.948 Million cell updates/sec

Title: US-10-775-180-449

Perfect score: 465
Sequence: 1 NHIFPLFLSLFVQGLEHT.....SYLREGQAKKPIAWLWVGR 89

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

- Database :
- 1: /cgnt2_6/prodata/1/iaa/5 COMB.pep.*
 - 2: /cgnt2_6/prodata/1/iaa/6 COMB.pep.*
 - 3: /cgnt2_6/prodata/1/iaa/R_COMB.pep.*
 - 4: /cgnt2_6/prodata/1/iaa/PCTUS_COMB.pep.*
 - 5: /cgnt2_6/prodata/1/iaa/R_COMB.pep.*
 - 6: /cgnt2_6/prodata/1/iaa/backffile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	243.5	52.4	180	2	US-08-784-582-58
2	241.5	51.9	180	2	US-08-784-582-56
3	241.5	51.9	180	2	US-09-635-679E-2
4	237.5	51.1	180	2	US-08-784-582-61
5	235.5	50.6	360	2	US-08-784-582-73
6	164	35.3	36	2	US-09-614-847-119
7	164	35.3	42	2	US-09-614-847-118
8	157	33.8	30	2	US-09-209-799D-15
9	157	33.8	30	2	US-09-614-847-87
10	157	33.8	30	2	US-09-614-847-112
11	157	33.8	30	2	US-09-614-847-113
12	157	33.8	31	2	US-09-997-792A-13
13	157	33.8	31	2	US-09-209-799D-16
14	157	33.8	31	2	US-09-614-847-111
15	157	33.8	31	2	US-09-614-847-123
16	157	33.8	31	2	US-09-997-792A-14
17	157	33.8	34	2	US-09-614-847-147
18	157	33.8	32	2	US-09-212-663-25
19	157	33.8	36	1	US-08-095-162-15
20	157	33.8	36	1	US-08-470-220A-15
21	157	33.8	36	1	US-08-808-825-9
22	157	33.8	36	1	US-08-899-324-1
23	157	33.8	36	2	US-08-967-374-15
24	157	33.8	36	2	US-08-329-892B-1
25	157	33.8	36	2	US-09-302-596-2
26	157	33.8	36	2	US-08-472-349-6
27	157	33.8	36	2	US-09-333-415-2

Result	Score	Query Match	Length	DB ID	Description
28	157	33.8	36	2	US-09-505-991-15
29	157	33.8	36	2	US-09-303-016-2
30	157	33.8	36	2	US-09-614-847-88
31	157	33.8	36	2	US-09-614-847-90
32	157	33.8	36	2	US-09-614-847-103
33	157	33.8	36	2	US-09-805-507-2
34	157	33.8	36	2	US-09-859-804-2
35	157	33.8	36	2	US-09-943-084-6
36	157	33.8	36	2	US-09-623-548A-342
37	157	33.8	36	2	US-09-623-548A-354
38	157	33.8	36	2	US-10-055-252-2
39	157	33.8	36	2	US-09-657-276-342
40	157	33.8	36	2	US-09-657-276-354
41	157	33.8	36	2	US-09-982-978-2
42	157	33.8	36	4	PCT-US95-15800-24
43	157	33.8	37	1	US-08-095-162-19
44	157	33.8	37	1	US-08-470-220A-19
45	157	33.8	37	1	US-08-807-263-2

ALIGNMENTS

RESULT 1
US-08-784-582-58
; Sequence 58, Application US/08784582
; Patent No. 6110707
; GENERAL INFORMATION:
; APPLICANT: Newgard, Christopher B.
; APPLICANT: Halban, Philippe A.
; APPLICANT: No. 6110707/mtngton, Karl D.
; APPLICANT: Clark, Samuel A.
; APPLICANT: Thijsen, Antice B.
; APPLICANT: Kruse, Fred
; APPLICANT: Mcgarry, Dennis
; TITLE OF INVENTION: RECOMBINANT EXPRESSION OF PROTEINS FROM
; TITLE OF INVENTION: SECRETORY CELL LINES
; NUMBER OF SEQUENCES: 79
; CORRESPONDENCE ADDRESS:
; ADDRESS: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/784,582
; FILING DATE: Concurrently Herewith
; CLASSIFICATION: 435
; PRIORITY INFORMATION:
; APPLICATION NUMBER: US 60/028,427
; FILING DATE: 15-OCT-1996
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 08/589,028
; FILING DATE: 19-JAN-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Highlander, Steven L.
; REGISTRATION NUMBER: 37,642
; REFERENCE/DOCKET NUMBER: UTSD:514
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3000
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 58:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 180 amino acids
; TYPE: amino acid
; STRANDEDNESS:


```

TITLE OF INVENTION: RECOMBINANT EXPRESSION OF PROTEINS FROM
TITLE OF INVENTION: SECRETORY CELL LINES
NUMBER OF SEQUENCES: 79
CORRESPONDENCE ADDRESS:
ADDRESS: Arnold, White & Durkee
STREET: P.O. Box 4433
CITY: Houston
STATE: Texas
COUNTRY: USA
ZIP: 77210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/784,582
FILING DATE: Concurrently Herewith
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/028,427
FILING DATE: 15-OCT-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/589,028
FILING DATE: 19-JAN-1996
ATTORNEY/AGENT INFORMATION:
NAME: Highlander, Steven L.
REGISTRATION NUMBER: 37,642
REFERENCE/DOCKET NUMBER: UTSD:514
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
LENGTH: 180 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
US-08-784-582-61

Query Match      51.1%; Score 237.5; DB 2; Length 180;
Best Local Similarity 41.6%; Pred. No. 1.2e-20;
Matches 52; Conservative 15; Mismatches 21; Indels 37; Gaps 3;

Qy      2  NIPFTIFPLISFVVG-----LEHTHRRG-----SIDKRGEGTFTSDV 39
       ::::  |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db      3  SIYFVAGIFVWLVGSSNQRSLSQDTREKSRFSASQADPLDPDQMNEDKAKHSQGTFTSDY 62

Qy      40  SSYLEGQAARFIAMLVK-----GRHGGRTFTSDVSSYLEGQAARFIAM 84
       :|||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db      63  SKYDSTRRAQDFVQWMLMNTKRNINIAKRHDPEFRHAEAGTFTSDVSSYLEGQAARFIAM 122

Qy      85  LVKGR 89
       ||||
Db     123  LVKGR 127

RESULT 5
US-08-784-582-73
; Sequence 73, Application US/08784582
; Patent No. 6110707
; GENERAL INFORMATION:
; APPLICANT: Newgard, Christopher B.
; APPLICANT: Halban, Philippe A.
; APPLICANT: No. 6110707mington, Karl D.
; APPLICANT: Clark, Samuel A.
; APPLICANT: Thigpen, Anice E.
; APPLICANT: Quade, Christian
; APPLICANT: Kruee, Fred
; APPLICANT: McGarity, Dennis
; TITLE OF INVENTION: RECOMBINANT EXPRESSION OF PROTEINS FROM
; TITLE OF INVENTION: SECRETORY CELL LINES
; NUMBER OF SEQUENCES: 79

```

```

CORRESPONDENCE ADDRESS:
ADDRESS: Arnold, White & Durkee
STREET: P.O. Box 4433
CITY: Houston
STATE: Texas
COUNTRY: USA
ZIP: 77210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/784,582
FILING DATE: Concurrently Herewith
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/028,427
FILING DATE: 15-OCT-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/589,028
FILING DATE: 19-JAN-1996
ATTORNEY/AGENT INFORMATION:
NAME: Highlander, Steven L.
REGISTRATION NUMBER: 37,642
REFERENCE/DOCKET NUMBER: UTSD:514
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO: 73:
SEQUENCE CHARACTERISTICS:
LENGTH: 360 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
US-08-784-582-73

Query Match      50.6%; Score 235.5; DB 2; Length 360;
Best Local Similarity 59.0%; Pred. No. 5.1e-20;
Matches 46; Conservative 7; Mismatches 10; Indels 15; Gaps 1;

Qy      27  DKHRGEGTFTSDVSSYLEGQAARFIAMLVK-----GRHGGRTFTSDVSS 71
       :|||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db     230  DKHRSQGTFTSDVSSKLDSTRRAQDFVQWMLMNTKRNINIAKRHDPEFRHAEAGTFTSDVSS 289

Qy      72  YLEGQAARFIAMLVKGR 89
       ||||
Db     290  YLEGQAARFIAMLVKGR 307

RESULT 6
US-09-614-847-119
; Sequence 119, Application US/09614847
; Patent No. 6528486
; GENERAL INFORMATION:
; APPLICANT: Larsen, Bjarne Due
; APPLICANT: Mikkelsen, Jens Mollgaard
; APPLICANT: Neve, Soren
; TITLE OF INVENTION: NOVEL PEPTIDE AGONISTS OF GLP-1 ACTIVITY
; FILE REFERENCE: 55511(45487)
; CURRENT APPLICATION NUMBER: US/09/614,847
; PRIOR FILING DATE: 2000-07-12
; PRIOR APPLICATION NUMBER: US 60/143,591
; PRIOR FILING DATE: 1999-07-13
; NUMBER OF SEQ ID NOS: 153
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 119
; LENGTH: 36
; TYPE: PPT
; ORGANISM: Artificial Sequence
; FEATURES:
; OTHER INFORMATION: Description of Artificial Sequence:
; OTHER INFORMATION: Lys6-Gly8-GLP-1(7-36)

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US-09-614-847-119

Query Match 35.3%; Score 164; DB 2; Length 36; Best Local Similarity 96.9%; Pred. No. 9.4e-13; Matches 31; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 28 KKHGEGTSDVSSYLEGQAQAKRFIAMLVKGR 59
DB 5 KKHGEGTSDVSSYLEGQAQAKRFIAMLVKGR 36

RESULT 7
US-09-614-847-118

; Sequence 118, Application US/09614847
; Patent No. 6528486
; GENERAL INFORMATION:
; APPLICANT: Larsen, Bjarne Due
; APPLICANT: Mikkelson, Jens Molligaard
; APPLICANT: Neve, Soren
; TITLE OF INVENTION: NOVEL PEPTIDE AGONISTS OF GLP-1 ACTIVITY
; FILE REFERENCE: 55511(45487)
; CURRENT APPLICATION NUMBER: US/09/614,847
; PRIORITY FILING DATE: 2000-07-12
; PRIOR APPLICATION NUMBER: US 60/143,591
; PRIORITY FILING DATE: 1999-07-13
; NUMBER OF SEQ ID NOS: 153
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 118
; LENGTH: 42
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:
US-09-614-847-118

Query Match 35.3%; Score 164; DB 2; Length 42; Best Local Similarity 96.9%; Pred. No. 1.1e-12; Matches 31; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 28 KKHGEGTSDVSSYLEGQAQAKRFIAMLVKGR 59
DB 5 KKHGEGTSDVSSYLEGQAQAKRFIAMLVKGR 36

RESULT 8
US-09-209-799D-15

; Sequence 15, Application US/09209799D
; Patent No. 6380357
; GENERAL INFORMATION:
; APPLICANT: Hermeling, Ronald
; APPLICANT: Hoffmann, James
; APPLICANT: Narasimhan, Chakravarthy
; TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS
; FILE REFERENCE: X-10242
; CURRENT APPLICATION NUMBER: US/09/209,799D
; PRIORITY FILING DATE: 1998-12-11
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 15
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: synthetic construct
US-09-209-799D-15

QY 30 HGGGTSDVSSYLEGQAQAKRFIAMLVKGR 59
DB 1 HGGGTSDVSSYLEGQAQAKRFIAMLVKGR 30

Query Match 33.8%; Score 157; DB 2; Length 30; Best Local Similarity 100.0%; Pred. No. 5.1e-12; Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 HGGGTSDVSSYLEGQAQAKRFIAMLVKGR 30

RESULT 9
US-09-614-847-87

; Sequence 87, Application US/09614847
; Patent No. 6528486
; GENERAL INFORMATION:
; APPLICANT: Larsen, Bjarne Due
; APPLICANT: Mikkelson, Jens Molligaard
; APPLICANT: Neve, Soren
; TITLE OF INVENTION: NOVEL PEPTIDE AGONISTS OF GLP-1 ACTIVITY
; FILE REFERENCE: 55511(45487)
; CURRENT APPLICATION NUMBER: US/09/614,847
; PRIORITY FILING DATE: 2000-07-12
; PRIOR APPLICATION NUMBER: US 60/143,591
; PRIORITY FILING DATE: 1999-07-13
; NUMBER OF SEQ ID NOS: 153
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 87
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:
US-09-614-847-87

Query Match 33.8%; Score 157; DB 2; Length 30; Best Local Similarity 100.0%; Pred. No. 5.1e-12; Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 30 HGGGTSDVSSYLEGQAQAKRFIAMLVKGR 59
DB 1 HGGGTSDVSSYLEGQAQAKRFIAMLVKGR 30

RESULT 10
US-09-614-847-112

; Sequence 112, Application US/09614847
; Patent No. 6528486
; GENERAL INFORMATION:
; APPLICANT: Larsen, Bjarne Due
; APPLICANT: Mikkelson, Jens Molligaard
; APPLICANT: Neve, Soren
; TITLE OF INVENTION: NOVEL PEPTIDE AGONISTS OF GLP-1 ACTIVITY
; FILE REFERENCE: 55511(45487)
; CURRENT APPLICATION NUMBER: US/09/614,847
; PRIORITY FILING DATE: 2000-07-12
; PRIOR APPLICATION NUMBER: US 60/143,591
; PRIORITY FILING DATE: 1999-07-13
; NUMBER OF SEQ ID NOS: 153
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 112
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:
US-09-614-847-112

QY 30 HGGGTSDVSSYLEGQAQAKRFIAMLVKGR 59
DB 1 HGGGTSDVSSYLEGQAQAKRFIAMLVKGR 30

Query Match 33.8%; Score 157; DB 2; Length 30; Best Local Similarity 100.0%; Pred. No. 5.1e-12; Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

RESULT 11
US-09-614-847-113
; Sequence 113, Application US/09614847
; Patent No. 6528486
; GENERAL INFORMATION:
; APPLICANT: Mikkelsen, Bjarne Due
; APPLICANT: Larsen, Jens Mollgaard
; APPLICANT: Mikkelsen, Jens Mollgaard
; APPLICANT: Neve, Soren
; TITLE OF INVENTION: NOVEL PEPTIDE AGONISTS OF GLP-1 ACTIVITY
; FILE REFERENCE: 55511(45487)
; CURRENT APPLICATION NUMBER: US/09/614,847
; PRIORITY FILING DATE: 2000-07-12
; PRIORITY APPLICATION NUMBER: US 60/143,591
; PRIORITY FILING DATE: 1999-07-13
; NUMBER OF SEQ ID NOS: 153
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 113
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:
; NAME/KEY: MOD_RES
; LOCATION: (20)
; OTHER INFORMATION: Lys(N-palmitoyl)
US-09-614-847-113

Query Match          33.8%; Score 157; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. No. 5,1e-12;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      30 HGEFTFTSDVSSYLEGQAQAKEFIAMLVKGR 59
Db      1 HGEFTFTSDVSSYLEGQAQAKEFIAMLVKGR 30

```

```

; GENERAL INFORMATION:
; APPLICANT: Hermeling, Ronald
; APPLICANT: Hoffmann, James
; APPLICANT: Narasimhan, Chakravarthy
; TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS
; FILE REFERENCE: X-10242
; CURRENT APPLICATION NUMBER: US/09/209,799D
; PRIORITY FILING DATE: 1998-12-11
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 16
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: synthetic construct
US-09-209-799D-16

Query Match          33.8%; Score 157; DB 2; Length 31;
Best Local Similarity 100.0%; Pred. No. 5,3e-12;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      30 HGEFTFTSDVSSYLEGQAQAKEFIAMLVKGR 59
Db      1 HGEFTFTSDVSSYLEGQAQAKEFIAMLVKGR 30

RESULT 14
US-09-614-847-111
; Sequence 111, Application US/09614847
; Patent No. 6528486
; GENERAL INFORMATION:
; APPLICANT: Larsen, Bjarne Due
; APPLICANT: Mikkelsen, Jens Mollgaard
; APPLICANT: Neve, Soren
; TITLE OF INVENTION: NOVEL PEPTIDE AGONISTS OF GLP-1 ACTIVITY
; FILE REFERENCE: 55511(45487)
; CURRENT APPLICATION NUMBER: US/09/614,847
; PRIORITY FILING DATE: 2000-07-12
; PRIORITY APPLICATION NUMBER: US 60/143,591
; PRIORITY FILING DATE: 1999-07-13
; NUMBER OF SEQ ID NOS: 153
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 111
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:
; NAME/KEY: MOD_RES
; LOCATION: (31)
; OTHER INFORMATION: Lys(N-palmitoyl)
US-09-614-847-111

Query Match          33.8%; Score 157; DB 2; Length 31;
Best Local Similarity 100.0%; Pred. No. 5,3e-12;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      30 HGEFTFTSDVSSYLEGQAQAKEFIAMLVKGR 59
Db      1 HGEFTFTSDVSSYLEGQAQAKEFIAMLVKGR 30

RESULT 15
US-09-614-847-123
; Sequence 123, Application US/09614847
; Patent No. 6528486
; GENERAL INFORMATION:
; APPLICANT: Larsen, Bjarne Due
; APPLICANT: Mikkelsen, Jens Mollgaard
; APPLICANT: Neve, Soren
; TITLE OF INVENTION: NOVEL PEPTIDE AGONISTS OF GLP-1 ACTIVITY
US-09-614-847-123

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FILE REFERENCE: 55511(45487)
CURRENT APPLICATION NUMBER: US/09/614,847
CURRENT FILING DATE: 2000-07-12
PRIOR APPLICATION NUMBER: US 60/143,591
PRIOR FILING DATE: 1999-07-13
NUMBER OF SEQ ID NOS: 153
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO: 123
LENGTH: 31
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: G1y8-GLP-1(7-37)
US-09-614-847-123

Query Match 33.8%; Score 157; DB 2; Length 31;
Best Local Similarity 100.0%; Pred. No. 5.3e-12;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 30 HGEGETSDVSSYLEGQAQAEPIAMLVKGR 59
|||||
Db 1 HGEGETSDVSSYLEGQAQAEPIAMLVKGR 30

Search completed: April 19, 2006, 12:11:37
Job time : 6.62571 secs

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using sw model

Run on: April 19, 2006, 12:29:13 ; Search time 18.7734 Seconds
(without alignments)
1980.821 Million cell updates/sec

Title: US-10-775-180-449

Perfect score: 465 1 MNIFYIFLPLFSFVQSGIHEHT.....SSYLEGQAKAFIAMLVYKGR 89

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications NA Main:
1: /cgn2_6/ptodata/1/pubppaa/US07_PUBCOMB.pep:**
2: /cgn2_6/ptodata/1/pubppaa/US08_PUBCOMB.pep:**
3: /cgn2_6/ptodata/1/pubppaa/US09_PUBCOMB.pep:**
4: /cgn2_6/ptodata/1/pubppaa/US10A_PUBCOMB.pep:**
5: /cgn2_6/ptodata/1/pubppaa/US10B_PUBCOMB.pep:**
6: /cgn2_6/ptodata/1/pubppaa/US11_PUBCOMB.pep:**

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	465	100.0	89	US-10-775-180-449	Sequence 449, App
2	465	100.0	89	US-10-775-204-1282	Sequence 1282, App
3	465	100.0	673	US-10-775-180-834	Sequence 834, App
4	465	100.0	673	US-10-775-204-2170	Sequence 2170, App
5	465	100.0	674	US-10-775-180-447	Sequence 447, App
6	465	100.0	674	US-10-775-204-1280	Sequence 1280, App
7	341.5	73.4	669	US-10-775-180-419	Sequence 419, App
8	341.5	73.4	669	US-10-775-204-1231	Sequence 1231, App
9	341.5	73.3	145	US-10-775-180-685	Sequence 685, App
10	341.5	73.3	145	US-10-775-204-1790	Sequence 1790, App
11	341.5	73.3	730	US-10-775-180-610	Sequence 610, App
12	341.5	72.3	730	US-10-775-204-1622	Sequence 1622, App
13	335.5	72.2	669	US-10-775-180-425	Sequence 425, App
14	335.5	72.2	669	US-10-775-204-1237	Sequence 1237, App
15	335.5	72.0	145	US-10-775-180-687	Sequence 687, App
16	335.5	72.0	145	US-10-775-204-1792	Sequence 1792, App
17	335.5	72.0	730	US-10-775-180-612	Sequence 612, App
18	335.5	72.0	730	US-10-775-204-1624	Sequence 1624, App
19	329.5	70.9	669	US-10-775-180-420	Sequence 420, App
20	329.5	70.9	669	US-10-775-180-421	Sequence 421, App
21	329.5	70.9	669	US-10-775-180-423	Sequence 423, App
22	329.5	70.9	669	US-10-775-180-424	Sequence 424, App
23	329.5	70.9	669	US-10-775-204-1232	Sequence 1232, App
24	329.5	70.9	669	US-10-775-204-1233	Sequence 1233, App
25	329.5	70.9	669	US-10-775-204-1235	Sequence 1235, App
26	329.5	70.9	669	US-10-775-204-1236	Sequence 1236, App
27	324	69.7	83	US-10-775-180-684	Sequence 684, App

Result No.	Score	Query Match	Length	DB ID	Description
28	324	69.7	83	US-10-775-204-1789	Sequence 1789, App
29	324	69.7	668	US-10-775-180-609	Sequence 609, App
30	324	69.7	668	US-10-775-204-1621	Sequence 1621, App
31	319	68.6	77	US-10-775-180-686	Sequence 686, App
32	319	68.6	77	US-10-775-204-1791	Sequence 1791, App
33	319	68.6	662	US-10-775-180-611	Sequence 611, App
34	319	68.6	662	US-10-775-204-1623	Sequence 1623, App
35	318	68.4	83	US-10-775-180-688	Sequence 688, App
36	318	68.4	83	US-10-775-204-1793	Sequence 1793, App
37	318	68.4	668	US-10-775-180-613	Sequence 613, App
38	318	68.4	668	US-10-775-204-1625	Sequence 1625, App
39	317.5	68.3	664	US-10-775-180-598	Sequence 598, App
40	317.5	68.3	664	US-10-775-204-1607	Sequence 1607, App
41	315.5	67.8	663	US-10-775-180-600	Sequence 600, App
42	315.5	67.8	663	US-10-775-204-1609	Sequence 1609, App
43	314	67.5	60	US-10-775-180-835	Sequence 835, App
44	314	67.5	60	US-10-775-204-2180	Sequence 2180, App
45	313	67.3	77	US-10-775-180-689	Sequence 689, App

ALIGNMENTS

```

RESULT 1
US-10-775-180-449
; Sequence 449, Application US/10775180
; Publication No. US20050054570A1
GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: P574
CURRENT APPLICATION NUMBER: US/10/775,180
PRIOR APPLICATION NUMBER: PCT/US02/40892
PRIOR FILING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR FILING DATE: 2002-02-28
PRIOR APPLICATION NUMBER: 60/378,950
PRIOR FILING DATE: 2002-05-10
PRIOR APPLICATION NUMBER: 60/398,008
PRIOR FILING DATE: 2002-07-24
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR FILING DATE: 2002-09-18
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR FILING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: 60/417,611
PRIOR FILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/420,246
PRIOR FILING DATE: 2002-10-23
PRIOR APPLICATION NUMBER: 60/423,623
PRIOR FILING DATE: 2002-11-05
Remaining Prior Application data removed - See File Wrapper or PAM.
NUMBER OF SEQ ID NOS: 858
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 449
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-775-180-449

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Query Match 100.0%; Score 465; DB 5; Length 89;
Best Local Similarity 100.0%; Pred. No. 2.8e+4; Indels 0; Gaps 0;
Matches 89; Conservative 0; Mismatches 0;

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QY 1 MNIFYIFLPLFSFVQSGIHEHTRRRSGLRKRGEGFTSDVSSYLEGQAKAFIAMLVYKGR 60
DB 1 MNIFYIFLPLFSFVQSGIHEHTRRRSGLRKRGEGFTSDVSSYLEGQAKAFIAMLVYKGR 60
QY 61 GEGFTSDVSSYLEGQAKAFIAMLVYKGR 89

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Db 61 GEGTFTSDVSSYLEGQAAKEFIAMLVKGR 89

RESULT 2

US-10-775-204-1282
 ; Sequence 1282, Application US/10775204
 ; Publication No. US20050186664A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Rosen, Craig A.
 ; APPLICANT: Balance, David J.
 ; APPLICANT: Turner, Andrew J.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PFS64
 ; CURRENT APPLICATION NUMBER: US/10/775,204
 ; PRIOR FILING DATE: 2004-02-11
 ; PRIOR APPLICATION NUMBER: 60/341,811
 ; PRIOR FILING DATE: 2001-12-21
 ; PRIOR APPLICATION NUMBER: 60/360,000
 ; PRIOR FILING DATE: 2002-02-28
 ; PRIOR APPLICATION NUMBER: 60/378,950
 ; PRIOR FILING DATE: 2002-05-10
 ; PRIOR APPLICATION NUMBER: 60/398,008
 ; PRIOR FILING DATE: 2002-07-24
 ; PRIOR APPLICATION NUMBER: 60/411,355
 ; PRIOR FILING DATE: 2002-09-18
 ; PRIOR APPLICATION NUMBER: 60/414,984
 ; PRIOR FILING DATE: 2002-10-02
 ; PRIOR APPLICATION NUMBER: 60/417,611
 ; PRIOR FILING DATE: 2002-10-11
 ; PRIOR APPLICATION NUMBER: 60/420,246
 ; PRIOR FILING DATE: 2002-10-23
 ; PRIOR APPLICATION NUMBER: 60/423,623
 ; PRIOR FILING DATE: 2002-11-05
 ; PRIOR APPLICATION NUMBER: 60/351,360
 ; PRIOR FILING DATE: 2002-01-28
 ; Remaining Prior Application data removed - See file wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 2222
 ; SOFTWARE: Patentln Ver. 2.0
 ; SEQ ID NO 1282
 ; LENGTH: 89
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-10-775-204-1282

Query Match 100.0%; Score 465; DB 5; Length 89;
 Best Local Similarity 100.0%; Pred. No. 2.8e-44; Indels 0; Gaps 0;
 Matches 89; Conservative 0; Mismatches 0;

Qy 1 MNIFYIFLFLSVQGLHETHRGSLDKRHGEGTFTSDVSSYLEGQAAKEFIAMLVKGRH 60
 |||||||||
 Db 1 MNIFYIFLFLSVQGLHETHRGSLDKRHGEGTFTSDVSSYLEGQAAKEFIAMLVKGRH 60
 |||||||||

Qy 61 GEGTFTSDVSSYLEGQAAKEFIAMLVKGR 89
 |||||||||
 Db 61 GEGTFTSDVSSYLEGQAAKEFIAMLVKGR 89
 |||||||||

RESULT 3
 US-10-775-180-834
 ; Sequence 834, Application US/10775180
 ; Publication No. US20050054570A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Rosen, Craig A.
 ; APPLICANT: Haseltine, William A.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PFS74
 ; CURRENT APPLICATION NUMBER: US/10/775,180
 ; PRIOR FILING DATE: 2004-02-11
 ; PRIOR APPLICATION NUMBER: PCT/US02/40892
 ; PRIOR FILING DATE: 2002-12-23
 ; PRIOR APPLICATION NUMBER: 60/341,811
 ; PRIOR FILING DATE: 2001-12-21

PRIOR APPLICATION NUMBER: 60/360,000
 ; PRIOR FILING DATE: 2002-02-28
 ; PRIOR APPLICATION NUMBER: 60/378,950
 ; PRIOR FILING DATE: 2002-05-10
 ; PRIOR APPLICATION NUMBER: 60/398,008
 ; PRIOR FILING DATE: 2002-07-24
 ; PRIOR APPLICATION NUMBER: 60/411,355
 ; PRIOR FILING DATE: 2002-09-18
 ; PRIOR APPLICATION NUMBER: 60/414,984
 ; PRIOR FILING DATE: 2002-10-02
 ; PRIOR APPLICATION NUMBER: 60/417,611
 ; PRIOR FILING DATE: 2002-10-11
 ; PRIOR APPLICATION NUMBER: 60/420,246
 ; PRIOR FILING DATE: 2002-10-23
 ; PRIOR APPLICATION NUMBER: 60/423,623
 ; PRIOR FILING DATE: 2002-11-05
 ; Remaining Prior Application data removed - See file wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 858
 ; SOFTWARE: Patentln Ver. 2.0
 ; SEQ ID NO 834
 ; LENGTH: 673
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-10-775-180-834

Query Match 100.0%; Score 465; DB 5; Length 673;
 Best Local Similarity 100.0%; Pred. No. 2.9e-43; Indels 0; Gaps 0;
 Matches 89; Conservative 0; Mismatches 0;

Qy 1 MNIFYIFLFLSVQGLHETHRGSLDKRHGEGTFTSDVSSYLEGQAAKEFIAMLVKGRH 60
 |||||||||
 Db 1 MNIFYIFLFLSVQGLHETHRGSLDKRHGEGTFTSDVSSYLEGQAAKEFIAMLVKGRH 60
 |||||||||

Qy 61 GEGTFTSDVSSYLEGQAAKEFIAMLVKGR 89
 |||||||||
 Db 61 GEGTFTSDVSSYLEGQAAKEFIAMLVKGR 89
 |||||||||

RESULT 4
 US-10-775-204-2170
 ; Sequence 2170, Application US/10775204
 ; Publication No. US20050186664A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Rosen, Craig A.
 ; APPLICANT: Haseltine, William A.
 ; APPLICANT: Balance, David J.
 ; APPLICANT: Turner, Andrew J.
 ; TITLE OF INVENTION: Albumin Fusion Proteins
 ; FILE REFERENCE: PFS64
 ; CURRENT APPLICATION NUMBER: US/10/775,204
 ; CURRENT FILING DATE: 2004-02-11
 ; PRIOR APPLICATION NUMBER: 60/341,811
 ; PRIOR FILING DATE: 2001-12-21
 ; PRIOR APPLICATION NUMBER: 60/360,000
 ; PRIOR FILING DATE: 2002-02-28
 ; PRIOR APPLICATION NUMBER: 60/378,950
 ; PRIOR FILING DATE: 2002-05-10
 ; PRIOR APPLICATION NUMBER: 60/398,008
 ; PRIOR FILING DATE: 2002-07-24
 ; PRIOR APPLICATION NUMBER: 60/411,355
 ; PRIOR FILING DATE: 2002-09-18
 ; PRIOR APPLICATION NUMBER: 60/414,984
 ; PRIOR FILING DATE: 2002-10-02
 ; PRIOR APPLICATION NUMBER: 60/417,611
 ; PRIOR FILING DATE: 2002-10-11
 ; PRIOR APPLICATION NUMBER: 60/420,246
 ; PRIOR FILING DATE: 2002-10-23
 ; PRIOR APPLICATION NUMBER: 60/423,623
 ; PRIOR FILING DATE: 2002-11-05
 ; PRIOR APPLICATION NUMBER: 60/351,360
 ; PRIOR FILING DATE: 2002-01-28
 ; Remaining Prior Application data removed - See file wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 2222

```

; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2170
; LENGTH: 673
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-775-204-2170

```

```

Query Match      100.0%; Score 465; DB 5; Length 673;
Best Local Similarity 100.0%; Pred. No. 2.9e-43;
Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 MNIFPIFLPLISFVQGLEHTHRGSLDKRHGEGFTSDVSSYLEGQAQAKKEFIAMLVKGRH 60
    |||
Db 1 MNIFPIFLPLISFVQGLEHTHRGSLDKRHGEGFTSDVSSYLEGQAQAKKEFIAMLVKGRH 60
Qy 61 GEGFTSDVSSYLEGQAQAKKEFIAMLVKGR 89
    |||
Db 61 GEGFTSDVSSYLEGQAQAKKEFIAMLVKGR 89

```

```

RESULT 5
US-10-775-180-447
; Sequence 447, Application US/10775180
; Publication No. US2005054570A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: P574
; CURRENT APPLICATION NUMBER: US/10/775,180
; PRIOR FILING DATE: 2004-02-11
; PRIOR APPLICATION NUMBER: PCT/US02/40892
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 858
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 447
; LENGTH: 674
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-775-180-447

```

```

Query Match      100.0%; Score 465; DB 5; Length 674;
Best Local Similarity 100.0%; Pred. No. 2.9e-43;
Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MNIFPIFLPLISFVQGLEHTHRGSLDKRHGEGFTSDVSSYLEGQAQAKKEFIAMLVKGRH 60
    |||
Db 1 MNIFPIFLPLISFVQGLEHTHRGSLDKRHGEGFTSDVSSYLEGQAQAKKEFIAMLVKGRH 60
Qy 61 GEGFTSDVSSYLEGQAQAKKEFIAMLVKGR 89
    |||
Db 61 GEGFTSDVSSYLEGQAQAKKEFIAMLVKGR 89

```

```

RESULT 6
US-10-775-204-1280
; Sequence 1280, Application US/10775204
; Publication No. US20050186664A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; APPLICANT: Balance, David J.
; APPLICANT: Turner, Andrew J.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: P564
; CURRENT APPLICATION NUMBER: US/10/775,204
; PRIOR FILING DATE: 2004-02-11
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1280
; LENGTH: 674
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-775-204-1280

```

```

Query Match      100.0%; Score 465; DB 5; Length 674;
Best Local Similarity 100.0%; Pred. No. 2.9e-43;
Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 MNIFPIFLPLISFVQGLEHTHRGSLDKRHGEGFTSDVSSYLEGQAQAKKEFIAMLVKGRH 60
    |||
Db 1 MNIFPIFLPLISFVQGLEHTHRGSLDKRHGEGFTSDVSSYLEGQAQAKKEFIAMLVKGRH 60
Qy 61 GEGFTSDVSSYLEGQAQAKKEFIAMLVKGR 89
    |||
Db 61 GEGFTSDVSSYLEGQAQAKKEFIAMLVKGR 89

```

```

RESULT 7
US-10-775-180-419
; Sequence 419, Application US/10775180
; Publication No. US2005054570A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: P574
; CURRENT APPLICATION NUMBER: US/10/775,180
; PRIOR FILING DATE: 2004-02-11
; PRIOR APPLICATION NUMBER: PCT/US02/40892
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950

```

```

Query Match      100.0%; Score 465; DB 5; Length 674;
Best Local Similarity 100.0%; Pred. No. 2.9e-43;
Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MNIFPIFLPLISFVQGLEHTHRGSLDKRHGEGFTSDVSSYLEGQAQAKKEFIAMLVKGRH 60
    |||
Db 1 MNIFPIFLPLISFVQGLEHTHRGSLDKRHGEGFTSDVSSYLEGQAQAKKEFIAMLVKGRH 60
Qy 61 GEGFTSDVSSYLEGQAQAKKEFIAMLVKGR 89
    |||
Db 61 GEGFTSDVSSYLEGQAQAKKEFIAMLVKGR 89

```

```

; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 858
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 419
; LENGTH: 669
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-775-180-419

```

```

Query Match 73.4%; Score 341.5; DB 5; Length 669;
Best Local Similarity 79.3%; Pred. No. 1,9e-29;
Matches 69; Conservative 4; Mismatches 5; Indels 9; Gaps 1;

```

```

QY 3 IFYIFLFLSFVQGLSEHTHRRGSLDKRHGEGFTTSDVSSYLEGQAQKRFIAMLVYKGRHGE 62
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 7 ISLFLFSSAYSR-----SLDKRHGEGFTTSDVSSYLEGQAQKRFIAMLVYKGRHGE 57
| : : : : : : : : : : : : : : : : : : : : : : : : :

```

```

RESULT 8
US-10-775-204-1231
; Sequence 1231, Application US/10775204
; Publication No. US20050186664A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; APPLICANT: Balance, David J.
; APPLICANT: Turner, Andrew J.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PE564
; CURRENT APPLICATION NUMBER: US/10/775,204
; CURRENT FILING DATE: 2004-02-11
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 1231
; LENGTH: 669

```

```

; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-775-204-1231

```

```

Query Match 73.4%; Score 341.5; DB 5; Length 669;
Best Local Similarity 79.3%; Pred. No. 1,9e-29;
Matches 69; Conservative 4; Mismatches 5; Indels 9; Gaps 1;

```

```

QY 3 IFYIFLFLSFVQGLSEHTHRRGSLDKRHGEGFTTSDVSSYLEGQAQKRFIAMLVYKGRHGE 62
| : : : : : : : : : : : : : : : : : : : : : : : : :
Db 7 ISLFLFSSAYSR-----SLDKRHGEGFTTSDVSSYLEGQAQKRFIAMLVYKGRHGE 57
| : : : : : : : : : : : : : : : : : : : : : : : : :

```

```

RESULT 9
US-10-775-180-685
; Sequence 685, Application US/10775180
; Publication No. US20050054570A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF574
; CURRENT APPLICATION NUMBER: US/10/775,180
; CURRENT FILING DATE: 2004-02-11
; PRIOR APPLICATION NUMBER: PCT/US02/40892
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 858
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 685
; LENGTH: 145
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-775-180-685

```

```

Query Match 73.3%; Score 341; DB 5; Length 145;
Best Local Similarity 81.7%; Pred. No. 3,7e-30;
Matches 67; Conservative 4; Mismatches 11; Indels 0; Gaps 0;

```

```

QY 8 LFLSLFVQGLSEHTHRRGSLDKRHGEGFTTSDVSSYLEGQAQKRFIAMLVYKGRHGEFTTS 67
| : : : : : : : : : : : : : : : : : : : : : : : : :
Db 64 LFINTTIASIAAKEEVSLSDKRHGEGFTTSDVSSYLEGQAQKRFIAMLVYKGRHGEFTTS 123
| : : : : : : : : : : : : : : : : : : : : : : : : :

```

```

QY 68 DVSSYLEGQAQKRFIAMLVYKGR 89
| : : : : : : : : : : : : : : : : : : : : : : : : :
Db 124 DVSSYLEGQAQKRFIAMLVYKGR 145
| : : : : : : : : : : : : : : : : : : : : : : : : :

```

```

RESULT 10
US-10-775-204-1790
; Sequence 1790, Application US/10775204

```

```

; Publication No. US20050186664A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; APPLICANT: Balance, David J.
; APPLICANT: Turner, Andrew J.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: P564
; CURRENT APPLICATION NUMBER: US/10/775,204
; PRIORITY FILING DATE: 2004-02-11
; PRIORITY APPLICATION NUMBER: 60/341,811
; PRIORITY FILING DATE: 2001-12-21
; PRIORITY APPLICATION NUMBER: 60/360,000
; PRIORITY FILING DATE: 2002-02-28
; PRIORITY APPLICATION NUMBER: 60/378,950
; PRIORITY FILING DATE: 2002-05-10
; PRIORITY APPLICATION NUMBER: 60/398,008
; PRIORITY FILING DATE: 2002-07-24
; PRIORITY APPLICATION NUMBER: 60/411,355
; PRIORITY FILING DATE: 2002-09-18
; PRIORITY APPLICATION NUMBER: 60/414,984
; PRIORITY FILING DATE: 2002-10-02
; PRIORITY APPLICATION NUMBER: 60/417,611
; PRIORITY FILING DATE: 2002-10-11
; PRIORITY APPLICATION NUMBER: 60/420,246
; PRIORITY FILING DATE: 2002-10-23
; PRIORITY APPLICATION NUMBER: 60/423,623
; PRIORITY FILING DATE: 2002-11-05
; PRIORITY APPLICATION NUMBER: 60/351,360
; PRIORITY FILING DATE: 2002-01-28
; Remaining Prior Application data removed - See File Wrapper or PAMM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 1790
; LENGTH: 145
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-775-204-1790

Query Match      73.3%; Score 341; DB 5; Length 145;
Best Local Similarity 81.7%; Pred. No. 3,7e-30;
Matches 67; Conservative 4; Mismatches 11; Indels 0; Gaps 0;

Qy      8 LPLSPVQGLEHTRRRGSLSDKRHGEGFTSDVSSYLEGQAAKEFIALMLVKGRHGGEGFTTS 67
      | : : : |
Db      64 LPIWTTIASIAAKEGVSJDKRHGEGFTSDVSSYLEGQAAKEFIALMLVKGRHGGEGFTTS 123

Qy      68 DVSSYLEGQAAKEFIALMLVKGR 89
      | | | | | | | | | | | | | | | |
Db      124 DVSSYLEGQAAKEFIALMLVKGR 145

RESULT 11
US-10-775-180-610
; Sequence 610, Application US/10775180
; Publication No. US20050054570A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: P574
; CURRENT APPLICATION NUMBER: US/10/775,180
; PRIORITY FILING DATE: 2004-02-11
; PRIORITY APPLICATION NUMBER: PCT/US02/40892
; PRIORITY FILING DATE: 2002-12-23
; PRIORITY APPLICATION NUMBER: 60/341,811
; PRIORITY FILING DATE: 2001-12-21
; PRIORITY APPLICATION NUMBER: 60/360,000
; PRIORITY FILING DATE: 2002-02-28
; PRIORITY APPLICATION NUMBER: 60/378,950
; PRIORITY FILING DATE: 2002-05-10
; PRIORITY APPLICATION NUMBER: 60/398,008
; PRIORITY FILING DATE: 2002-07-24
; Remaining Prior Application data removed - See File Wrapper or PAMM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 1790
; LENGTH: 145
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-775-204-1790

```

```

; PRIORITY APPLICATION NUMBER: 60/411,355
; PRIORITY FILING DATE: 2002-09-18
; PRIORITY APPLICATION NUMBER: 60/414,984
; PRIORITY FILING DATE: 2002-10-02
; PRIORITY APPLICATION NUMBER: 60/417,611
; PRIORITY FILING DATE: 2002-10-11
; PRIORITY APPLICATION NUMBER: 60/420,246
; PRIORITY FILING DATE: 2002-10-23
; PRIORITY APPLICATION NUMBER: 60/423,623
; PRIORITY FILING DATE: 2002-11-05
; Remaining Prior Application data removed - See File Wrapper or PAMM.
; NUMBER OF SEQ ID NOS: 858
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 610
; LENGTH: 730
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-775-180-610

Query Match      73.3%; Score 341; DB 5; Length 730;
Best Local Similarity 81.7%; Pred. No. 2,4e-29;
Matches 67; Conservative 4; Mismatches 11; Indels 0; Gaps 0;

Qy      8 LPLSPVQGLEHTRRRGSLSDKRHGEGFTSDVSSYLEGQAAKEFIALMLVKGRHGGEGFTTS 67
      | : : : |
Db      64 LPIWTTIASIAAKEGVSJDKRHGEGFTSDVSSYLEGQAAKEFIALMLVKGRHGGEGFTTS 123

Qy      68 DVSSYLEGQAAKEFIALMLVKGR 89
      | | | | | | | | | | | | | | | |
Db      124 DVSSYLEGQAAKEFIALMLVKGR 145

RESULT 12
US-10-775-204-1622
; Sequence 1622, Application US/10775204
; Publication No. US20050186664A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; APPLICANT: Balance, David J.
; APPLICANT: Turner, Andrew J.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: P564
; CURRENT APPLICATION NUMBER: US/10/775,204
; PRIORITY FILING DATE: 2004-02-11
; PRIORITY APPLICATION NUMBER: 60/341,811
; PRIORITY FILING DATE: 2001-12-21
; PRIORITY APPLICATION NUMBER: 60/360,000
; PRIORITY FILING DATE: 2002-02-28
; PRIORITY APPLICATION NUMBER: 60/378,950
; PRIORITY FILING DATE: 2002-05-10
; PRIORITY APPLICATION NUMBER: 60/398,008
; PRIORITY FILING DATE: 2002-07-24
; PRIORITY APPLICATION NUMBER: 60/411,355
; PRIORITY FILING DATE: 2002-09-18
; PRIORITY APPLICATION NUMBER: 60/414,984
; PRIORITY FILING DATE: 2002-10-02
; PRIORITY APPLICATION NUMBER: 60/417,611
; PRIORITY FILING DATE: 2002-10-11
; PRIORITY APPLICATION NUMBER: 60/420,246
; PRIORITY FILING DATE: 2002-10-23
; PRIORITY APPLICATION NUMBER: 60/423,623
; PRIORITY FILING DATE: 2002-11-05
; PRIORITY APPLICATION NUMBER: 60/351,360
; Remaining Prior Application data removed - See File Wrapper or PAMM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 1622
; LENGTH: 730
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-775-204-1622

```

Query Match 73.3%; Score 341; DB 5; Length 730; Best Local Similarity 81.7%; Pred. No. 2,4e-29; Matches 67; Conservative 4; Mismatches 11; Indels 0; Gaps 0;

QY 8 LFLISFVQGLHHTHRGSLDKRHGEGFTSDVSSYLEGQAARFIAMLVKGRHGEFTS 67
DB 64 LFLNNTTASIAAKEEGVSLDKRHGEGFTSDVSSYLEGQAARFIAMLVKGRHGEFTS 123
QY 68 DVSSYLEGQAARFIAMLVKGR 89
DB 124 DVSSYLEGQAARFIAMLVKGR 145

RESULT 13
US-10-775-180-425
; Sequence 425, Application US/10775180
; Publication No. US20050054570A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PE574
; CURRENT APPLICATION NUMBER: US/10/775,180
; PRIORITY FILING DATE: 2004-02-11
; PRIOR APPLICATION NUMBER: PCT/US02/40892
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; Remaining Prior Application data removed - See file wrapper or PALM.
; NUMBER OF SEQ ID NOS: 858
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 425
; LENGTH: 669
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-775-180-425

Query Match 72.2%; Score 335.5; DB 5; Length 669; Best Local Similarity 78.2%; Pred. No. 8.8e-29; Matches 68; Conservative 4; Mismatches 6; Indels 9; Gaps 1;

QY 3 IFYIFLFLSPVQGLHHTHRGSLDKRHGEGFTSDVSSYLEGQAARFIAMLVKGRHGE 62
DB 7 ISLIFLSPSAYSR-----SLDKRHGEGFTSDVSSYLEGQAARFIAMLVKGRHAE 57
QY 63 GTFPSDVSSYLEGQAARFIAMLVKGR 89
DB 58 GTFPSDVSSYLEGQAARFIAMLVKGR 84

RESULT 14
US-10-775-204-1237
; Sequence 1237, Application US/10775204
; Publication No. US20050186664A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.

; APPLICANT: Haseltine, William A.
; APPLICANT: Balance, David J.
; APPLICANT: Turner, Andrew J.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PE564
; CURRENT APPLICATION NUMBER: US/10/775,204
; PRIORITY FILING DATE: 2004-02-11
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984
; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; PRIOR APPLICATION NUMBER: 60/351,360
; Remaining Prior Application data removed - See file wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2222
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 1237
; LENGTH: 669
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-775-204-1237

Query Match 72.2%; Score 335.5; DB 5; Length 669; Best Local Similarity 78.2%; Pred. No. 8.8e-29; Matches 68; Conservative 4; Mismatches 6; Indels 9; Gaps 1;
QY 3 IFYIFLFLSPVQGLHHTHRGSLDKRHGEGFTSDVSSYLEGQAARFIAMLVKGRHGE 62
DB 7 ISLIFLSPSAYSR-----SLDKRHGEGFTSDVSSYLEGQAARFIAMLVKGRHAE 57
QY 63 GTFPSDVSSYLEGQAARFIAMLVKGR 89
DB 58 GTFPSDVSSYLEGQAARFIAMLVKGR 84

RESULT 15
US-10-775-180-687
; Sequence 687, Application US/10775180
; Publication No. US20050054570A1
; GENERAL INFORMATION:
; APPLICANT: Rosen, Craig A.
; APPLICANT: Haseltine, William A.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PE574
; CURRENT APPLICATION NUMBER: US/10/775,180
; PRIORITY FILING DATE: 2004-02-11
; PRIOR APPLICATION NUMBER: PCT/US02/40892
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 60/341,811
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/360,000
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: 60/378,950
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/398,008
; PRIOR FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: 60/411,355
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: 60/414,984

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; PRIOR FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: 60/417,611
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: 60/420,246
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: 60/423,623
; PRIOR FILING DATE: 2002-11-05
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 858
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 687
; LENGTH: 145
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-775-180-687

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Query Match      72.0%; Score 335; DB 5; Length 145;
Best Local Similarity 80.5%; Pred. No. 1,7e-29;
Matches 66; Conservative 4; Mismatches 12; Indels 0; Gaps 0;

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QY      8  LPLISFVQGLHHTHRKGLDVKRHRGEGTFTSDVSSYLEGQAKEFIAMLVKGRHGEETFTS 67
      |  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db      64  LPTNTTITASIAAKEEGVSLDKRHRGEGTFTSDVSSYLEGQAKEFIAMLVKGRHAEGETFTS 123
QY      68  DVSSYLEGQAKEFIAMLVKGR 89
      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
Db      124 DVSSYLEGQAKEFIAMLVKGR 145

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Search completed: April 19, 2006, 12:35:50
Job time : 18.7734 secs

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GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 19, 2006, 12:31:03 ; Search time 2.97088 Seconds
(without alignments)
1318.215 Million cell updates/sec

Title: US-10-775-180-449

Perfect score: 465
Sequence: 1 MNIFYIFLFLISFVQGIHEHT.....SSYLEGQAKKEFIAMLVKGR 89

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 225428 seqs, 44002918 residues

Total number of hits satisfying chosen parameters: 225428

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA New:
1: /SIDS5/protocata/1/pubpaa/US08_NEW_PUB.pep.*
2: /SIDS5/protocata/1/pubpaa/US06_NEW_PUB.pep.*
3: /SIDS5/protocata/1/pubpaa/US07_NEW_PUB.pep.*
4: /SIDS5/protocata/1/pubpaa/PCT_NEW_PUB.pep.*
5: /SIDS5/protocata/1/pubpaa/US09_NEW_PUB.pep.*
6: /SIDS5/protocata/1/pubpaa/US10_NEW_PUB.pep.*
7: /SIDS5/protocata/1/pubpaa/US11_NEW_PUB.pep.*
8: /SIDS5/protocata/1/pubpaa/US66_NEW_PUB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	465	100.0	674	7	US-11-175-690-206 Sequence 206, App
2	465	100.0	915	7	US-11-175-690-208 Sequence 208, App
3	317	68.2	647	7	US-11-175-690-212 Sequence 212, App
4	313.5	67.4	657	7	US-11-175-690-216 Sequence 216, App
5	313.5	67.4	657	7	US-11-175-690-303 Sequence 303, App
6	313	67.3	649	7	US-11-175-690-213 Sequence 213, App
7	312.5	67.2	652	7	US-11-175-690-218 Sequence 218, App
8	310.5	66.8	650	7	US-11-175-690-209 Sequence 209, App
9	309.5	66.6	646	7	US-11-175-690-223 Sequence 223, App
10	309.5	66.6	651	7	US-11-175-690-224 Sequence 224, App
11	309	66.5	648	7	US-11-175-690-214 Sequence 214, App
12	308	66.2	653	7	US-11-175-690-215 Sequence 215, App
13	308	66.2	654	7	US-11-175-690-219 Sequence 219, App
14	308	66.2	655	7	US-11-175-690-220 Sequence 220, App
15	308	66.2	656	7	US-11-175-690-225 Sequence 225, App
16	308	66.2	657	7	US-11-175-690-226 Sequence 226, App
17	308	66.2	658	7	US-11-175-690-210 Sequence 210, App
18	302.5	65.1	122	6	US-10-997-061-31 Sequence 31, App1
19	302.5	65.1	123	6	US-10-997-074-31 Sequence 31, App1
20	295	63.4	118	6	US-10-997-074-52 Sequence 52, App1
21	294.5	63.3	70	6	US-10-997-061-28 Sequence 28, App1
22	293	63.0	117	6	US-10-997-061-9 Sequence 9, App1
23	293	63.0	117	6	US-10-997-074-28 Sequence 28, App1
24	291	62.6	277	6	US-10-997-061-11 Sequence 11, App1
25	290.5	62.5	287	6	US-10-997-074-55 Sequence 55, App1

ALIGNMENTS

Result No.	Score	Query Match	Length	DB ID	Description
26	288	61.9	119	6	US-10-997-061-13 Sequence 13, App1
27	243.5	52.4	180	7	US-11-145-463-1 Sequence 1, App11
28	164	35.3	6	6	US-10-517-563-8 Sequence 8, App11
29	164	35.3	42	6	US-10-517-563-7 Sequence 7, App11
30	161	34.6	36	7	US-11-293-676-8 Sequence 8, App11
31	161	34.6	39	7	US-11-293-676-9 Sequence 9, App11
32	157	33.8	30	7	US-11-175-690-293 Sequence 293, App
33	157	33.8	30	7	US-11-175-690-295 Sequence 295, App
34	157	33.8	30	7	US-11-175-690-296 Sequence 296, App
35	157	33.8	30	7	US-11-175-690-297 Sequence 297, App
36	157	33.8	30	7	US-11-175-690-299 Sequence 299, App
37	157	33.8	30	7	US-11-175-690-300 Sequence 300, App
38	157	33.8	30	7	US-11-175-690-301 Sequence 301, App
39	157	33.8	30	7	US-11-175-690-302 Sequence 302, App
40	157	33.8	30	7	US-11-175-690-305 Sequence 305, App
41	157	33.8	30	7	US-11-175-690-306 Sequence 306, App
42	157	33.8	30	7	US-11-175-690-307 Sequence 307, App
43	157	33.8	30	7	US-11-175-690-308 Sequence 308, App
44	157	33.8	30	7	US-11-175-690-310 Sequence 310, App
45	157	33.8	30	7	US-11-175-690-311 Sequence 311, App

RESULT 1
US-11-175-690-206
Sequence 206, Application US/11175690
Publication No. US20060014254A1
GENERAL INFORMATION:
APPLICANT: Haseltine et al.
TITLE OR INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PR605
CURRENT APPLICATION NUMBER: US/11/175, 690
CURRENT FILING DATE: 2005-07-07
PRIOR APPLICATION NUMBER: PCT/US04/001369
PRIOR FILING DATE: 2004-01-20
PRIOR APPLICATION NUMBER: US 60/441,305
PRIOR FILING DATE: 2003-01-22
PRIOR APPLICATION NUMBER: US 60/453,201
PRIOR FILING DATE: 2003-03-11
PRIOR APPLICATION NUMBER: US 60/467,222
PRIOR FILING DATE: 2003-05-02
PRIOR APPLICATION NUMBER: US 60/472,816
PRIOR FILING DATE: 2003-05-23
PRIOR APPLICATION NUMBER: US 60/476,267
PRIOR FILING DATE: 2003-06-06
PRIOR APPLICATION NUMBER: US 60/505,172
PRIOR FILING DATE: 2003-09-24
PRIOR APPLICATION NUMBER: US 60/506,746
PRIOR FILING DATE: 2003-09-30
NUMBER OF SEQ ID NOS: 568
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 206
LENGTH: 674
TYPE: PRT
ORGANISM: Homo sapiens

Query Match 100.0%; Score 465; DB 7; Length 674;
Best Local Similarity 100.0%; Pred. No. 7.5e-45;
Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNIFYIFLFLISFVQGIHEHTRRGSLDKRGGEGTFTSDVSSYLEGQAKKEFIAMLVKGR 60
DB 1 MNIFYIFLFLISFVQGIHEHTRRGSLDKRGGEGTFTSDVSSYLEGQAKKEFIAMLVKGR 60

QY 61 GEGFTSDVSSYLEGQAKKEFIAMLVKGR 89
DB 61 GEGFTSDVSSYLEGQAKKEFIAMLVKGR 89

RESULT 2

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US-11-175-690-208
; Sequence 208, Application US/11175690
; Publication No. US20060014254A1
; GENERAL INFORMATION:
; APPLICANT: Haseltine et al.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF605
; CURRENT APPLICATION NUMBER: US/11/175,690
; CURRENT FILING DATE: 2005-07-07
; PRIOR APPLICATION NUMBER: PCT/US04/001369
; PRIOR FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: US 60/441,305
; PRIOR FILING DATE: 2003-01-22
; PRIOR APPLICATION NUMBER: US 60/453,201
; PRIOR FILING DATE: 2003-03-11
; PRIOR APPLICATION NUMBER: US 60/467,222
; PRIOR FILING DATE: 2003-05-02
; PRIOR APPLICATION NUMBER: US 60/472,816
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 60/476,267
; PRIOR FILING DATE: 2003-06-06
; PRIOR APPLICATION NUMBER: US 60/505,172
; PRIOR FILING DATE: 2003-09-24
; PRIOR APPLICATION NUMBER: US 60/506,746
; NUMBER OF SEQ ID NOS: 568
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 208
; LENGTH: 915
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-175-690-208

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Query Match      100.0%; Score 465; DB 7; Length 915;
Best Local Similarity 100.0%; Pred. No. 1.1e-44;
Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 MNIFYYFLFLLSFVQGLHHTHRRGSLDKRHGEGTFTSDVSSYLEGQAQAKKFIAMLVKGRH 60
Db      1 MNIFYYFLFLLSFVQGLHHTHRRGSLDKRHGEGTFTSDVSSYLEGQAQAKKFIAMLVKGRH 60
Qy      61 GEGTFTSDVSSYLEGQAQAKKFIAMLVKGR 89
Db      61 GEGTFTSDVSSYLEGQAQAKKFIAMLVKGR 89

```

RESULT 3

```

US-11-175-690-212
; Sequence 212, Application US/11175690
; Publication No. US20060014254A1
; GENERAL INFORMATION:
; APPLICANT: Haseltine et al.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF605
; CURRENT APPLICATION NUMBER: US/11/175,690
; CURRENT FILING DATE: 2005-07-07
; PRIOR APPLICATION NUMBER: PCT/US04/001369
; PRIOR FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: US 60/441,305
; PRIOR FILING DATE: 2003-01-22
; PRIOR APPLICATION NUMBER: US 60/453,201
; PRIOR FILING DATE: 2003-03-11
; PRIOR APPLICATION NUMBER: US 60/467,222
; PRIOR FILING DATE: 2003-05-02
; PRIOR APPLICATION NUMBER: US 60/472,816
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 60/476,267
; PRIOR FILING DATE: 2003-06-06
; PRIOR APPLICATION NUMBER: US 60/505,172
; PRIOR FILING DATE: 2003-09-24
; PRIOR APPLICATION NUMBER: US 60/506,746
; NUMBER OF SEQ ID NOS: 568

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; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 212
; LENGTH: 647
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-175-690-212

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Query Match      68.2%; Score 317; DB 7; Length 647;
Best Local Similarity 75.9%; Pred. No. 4.4e-28;
Matches 63; Conservative 4; Mismatches 16; Indels 0; Gaps 0;

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Qy      1 MNIFYYFLFLLSFVQGLHHTHRRGSLDKRHGEGTFTSDVSSYLEGQAQAKKFIAMLVKGRH 60
Db      1 MNIFYYFLFLLSFVQGLHHTHRRGSLDKRHGEGTFTSDVSSYLEGQAQAKKFIAMLVKGRH 60
Qy      61 GEGTFTSDVSSYLEGQAQAKKFI 83
Db      61 AHDAKSEVVAHRFKDGEENFKA 83

```

RESULT 4

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US-11-175-690-216
; Sequence 216, Application US/11175690
; Publication No. US20060014254A1
; GENERAL INFORMATION:
; APPLICANT: Haseltine et al.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF605
; CURRENT APPLICATION NUMBER: US/11/175,690
; CURRENT FILING DATE: 2005-07-07
; PRIOR APPLICATION NUMBER: PCT/US04/001369
; PRIOR FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: US 60/441,305
; PRIOR FILING DATE: 2003-01-22
; PRIOR APPLICATION NUMBER: US 60/453,201
; PRIOR FILING DATE: 2003-03-11
; PRIOR APPLICATION NUMBER: US 60/467,222
; PRIOR FILING DATE: 2003-05-02
; PRIOR APPLICATION NUMBER: US 60/472,816
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 60/476,267
; PRIOR FILING DATE: 2003-06-06
; PRIOR APPLICATION NUMBER: US 60/505,172
; PRIOR FILING DATE: 2003-09-24
; PRIOR APPLICATION NUMBER: US 60/506,746
; NUMBER OF SEQ ID NOS: 568
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 216
; LENGTH: 657
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-175-690-216

```

```

Query Match      67.4%; Score 313.5; DB 7; Length 657;
Best Local Similarity 77.1%; Pred. No. 1.1e-27;
Matches 64; Conservative 4; Mismatches 12; Indels 3; Gaps 1;

```

```

Qy      1 MNIFYYFLFLLSFVQGLHHTHRRGSLDKRHGEGTFTSDVSSYLEGQAQAKKFIAMLVKGRH 60
Db      1 MNIFYYFLFLLSFVQGLHHTHRRGSLDKRHGEGTFTSDVSSYLEGQAQAKKFIAMLVKGRH 60
Qy      61 GEGTFTSDVSSYLEGQAQAKKFI 83
Db      61 AH---KSEVAHRFKDDAHKSEVA 80

```

RESULT 5

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US-11-175-690-303
; Sequence 303, Application US/11175690
; Publication No. US20060014254A1
; GENERAL INFORMATION:
; APPLICANT: Haseltine et al.

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? TITLE OF INVENTION: Albumin Fusion Proteins
? FILE REFERENCE: PP605
? CURRENT FILING DATE: 2005-07-07
? PRIOR APPLICATION NUMBER: PCT/US04/001369
? PRIOR FILING DATE: 2004-01-20
? PRIOR APPLICATION NUMBER: US 60/441,305
? PRIOR FILING DATE: 2003-01-22
? PRIOR APPLICATION NUMBER: US 60/453,201
? PRIOR FILING DATE: 2003-03-11
? PRIOR APPLICATION NUMBER: US 60/467,222
? PRIOR FILING DATE: 2003-05-02
? PRIOR APPLICATION NUMBER: US 60/472,816
? PRIOR FILING DATE: 2003-05-23
? PRIOR APPLICATION NUMBER: US 60/476,267
? PRIOR FILING DATE: 2003-06-06
? PRIOR APPLICATION NUMBER: US 60/505,172
? PRIOR FILING DATE: 2003-09-24
? PRIOR APPLICATION NUMBER: US 60/506,746
? PRIOR FILING DATE: 2003-09-30
? NUMBER OF SEQ ID NOS: 568
? SOFTWARE: Patentln Ver. 2.0
? SEQ ID NO 303
? LENGTH: 657
? TYPE: PRT
? ORGANISM: Homo sapiens
US-11-175-690-303

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Query Match          67.4%; Score 313.5; DB 7; Length 657;
Best Local Similarity 77.1%; Pred. No. 1,1e-27;
Matches 64; Conservative 4; Mismatches 12; Indels 3; Gaps 1;

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Qy 1 MNIFYIFLFLSPVQGLEHTHRGSLDKRHRGEGTFTSDVSSYLEGQAAKEFIIAMLYKGRH 60
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Db 1 MNIFYIFLFLSPVQGLEHTHRGSLDKRHRGEGTFTSDVSSYLEGQAAKEFIIAMLYKGRD 60
    |||||||
Qy 61 GEGTFTSDVSSYLEGQAAKEFIIA 83
    |||
Db 61 AH--KSEVADAHKSEVVAHRF 80
    |||

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```

RESULT 6
US-11-175-690-213
? Sequence 213, Application US/11175690
? Publication No. US20060014254A1
? GENERAL INFORMATION:
? APPLICANT: Haseltine et al.
? TITLE OF INVENTION: Albumin Fusion Proteins
? FILE REFERENCE: PP605
? CURRENT APPLICATION NUMBER: US/11/175,690
? CURRENT FILING DATE: 2005-07-07
? PRIOR APPLICATION NUMBER: PCT/US04/001369
? PRIOR FILING DATE: 2004-01-20
? PRIOR APPLICATION NUMBER: US 60/441,305
? PRIOR FILING DATE: 2003-01-22
? PRIOR APPLICATION NUMBER: US 60/453,201
? PRIOR FILING DATE: 2003-03-11
? PRIOR APPLICATION NUMBER: US 60/467,222
? PRIOR FILING DATE: 2003-05-02
? PRIOR APPLICATION NUMBER: US 60/472,816
? PRIOR FILING DATE: 2003-05-23
? PRIOR APPLICATION NUMBER: US 60/476,267
? PRIOR FILING DATE: 2003-06-06
? PRIOR APPLICATION NUMBER: US 60/505,172
? PRIOR FILING DATE: 2003-09-24
? PRIOR APPLICATION NUMBER: US 60/506,746
? PRIOR FILING DATE: 2003-09-30
? NUMBER OF SEQ ID NOS: 568
? SOFTWARE: Patentln Ver. 2.0
? SEQ ID NO 213
? LENGTH: 649
? TYPE: PRT
? ORGANISM: Homo sapiens

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US-11-175-690-213

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Query Match          67.3%; Score 313; DB 7; Length 649;
Best Local Similarity 75.3%; Pred. No. 1.3e-27;
Matches 64; Conservative 4; Mismatches 15; Indels 2; Gaps 1;

```

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Qy 1 MNIFYIFLFLSPVQGLEHTHRGSLDKRHRGEGTFTSDVSSYLEGQAAKEFIIAMLYKGR 59
    |||||||
Db 1 MNIFYIFLFLSPVQGLEHTHRGSLDKRHRGEGTFTSDVSSYLEGQAAKEFIIAMLYKGRD 60
    |||||||
Qy 60 -HGEGTFTSDVSSYLEGQAAKEFIIA 83
    |||
Db 61 AHKSDAHKSEVVAHRFYDLGHEHPKA 85
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RESULT 7

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US-11-175-690-218
? Sequence 218, Application US/11175690
? Publication No. US20060014254A1
? GENERAL INFORMATION:
? APPLICANT: Haseltine et al.
? TITLE OF INVENTION: Albumin Fusion Proteins
? FILE REFERENCE: PP605
? CURRENT APPLICATION NUMBER: US/11/175,690
? CURRENT FILING DATE: 2005-07-07
? PRIOR APPLICATION NUMBER: PCT/US04/001369
? PRIOR FILING DATE: 2004-01-20
? PRIOR APPLICATION NUMBER: US 60/441,305
? PRIOR FILING DATE: 2003-01-22
? PRIOR APPLICATION NUMBER: US 60/453,201
? PRIOR FILING DATE: 2003-03-11
? PRIOR APPLICATION NUMBER: US 60/467,222
? PRIOR FILING DATE: 2003-05-02
? PRIOR APPLICATION NUMBER: US 60/472,816
? PRIOR FILING DATE: 2003-05-23
? PRIOR APPLICATION NUMBER: US 60/476,267
? PRIOR FILING DATE: 2003-06-06
? PRIOR APPLICATION NUMBER: US 60/505,172
? PRIOR FILING DATE: 2003-09-24
? PRIOR APPLICATION NUMBER: US 60/506,746
? PRIOR FILING DATE: 2003-09-30
? NUMBER OF SEQ ID NOS: 568
? SOFTWARE: Patentln Ver. 2.0
? SEQ ID NO 218
? LENGTH: 652
? TYPE: PRT
? ORGANISM: Homo sapiens
US-11-175-690-218

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```

Query Match          67.2%; Score 312.5; DB 7; Length 652;
Best Local Similarity 77.8%; Pred. No. 1.4e-27;
Matches 63; Conservative 4; Mismatches 11; Indels 3; Gaps 1;

```

```

Qy 1 MNIFYIFLFLSPVQGLEHTHRGSLDKRHRGEGTFTSDVSSYLEGQAAKEFIIAMLYKGRH 60
    |||||||
Db 1 MNIFYIFLFLSPVQGLEHTHRGSLDKRHRGEGTFTSDVSSYLEGQAAKEFIIAMLYKGRD 60
    |||||||
Qy 61 GEGTFTSDVSSYLEGQAAKEF 81
    |||
Db 61 AH--KSEVADAHKSEVVAHRF 78
    |||

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RESULT 8
US-11-175-690-209
? Sequence 209, Application US/11175690
? Publication No. US20060014254A1
? GENERAL INFORMATION:
? APPLICANT: Haseltine et al.
? TITLE OF INVENTION: Albumin Fusion Proteins
? FILE REFERENCE: PP605
? CURRENT APPLICATION NUMBER: US/11/175,690
? CURRENT FILING DATE: 2005-07-07
? PRIOR APPLICATION NUMBER: PCT/US04/001369

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? PRIOR FILING DATE: 2004-01-20
? PRIOR APPLICATION NUMBER: US 60/441,305
? PRIOR FILING DATE: 2003-01-22
? PRIOR APPLICATION NUMBER: US 60/453,201
? PRIOR FILING DATE: 2003-03-11
? PRIOR APPLICATION NUMBER: US 60/467,222
? PRIOR FILING DATE: 2003-05-02
? PRIOR APPLICATION NUMBER: US 60/472,816
? PRIOR FILING DATE: 2003-05-23
? PRIOR APPLICATION NUMBER: US 60/476,267
? PRIOR FILING DATE: 2003-06-06
? PRIOR APPLICATION NUMBER: US 60/505,172
? PRIOR FILING DATE: 2003-09-24
? PRIOR APPLICATION NUMBER: US 60/506,746
? PRIOR FILING DATE: 2003-09-30
? NUMBER OF SEQ ID NOS: 568
? SOFTWARE: PatentIn Ver. 2.0
? SEQ ID NO 209
? LENGTH: 650
? TYPE: PRF
? ORGANISM: Homo sapiens
US-11-175-690-209

Query Match      66.8%; Score 310.5; DB 7; Length 650;
Best Local Similarity 74.4%; Pred. No. 2,4e-27;
Matches 64; Conservative 4; Mismatches 15; Indels 3; Gaps 1;

QY 1 MNIFYIFLFLSVQGLQHTHTHRGSLDKRHGEGTFTSDVSSYLEGQAAKEFTAMLVKGR- 59
   |||
Db 1 MNIFYIFLFLSVQGLQHTHTHRGSLDKRHGEGTFTSDVSSYLEGQAAKEFTAMLVKGRD 60
QY 60 --HGEFTPSDVSSYLEGQAAKEFIA 83
Db 61 AHKSEVAHRFKDGLGEENFKA 86

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RESULT 9
? Sequence 223, Application US/11175690
? Publication No. US20060014254A1
? GENERAL INFORMATION:
? APPLICANT: Haseltine et al.
? FILE REFERENCE: PF605
? TITLE OF INVENTION: Albumin Fusion Proteins
? CURRENT APPLICATION NUMBER: US/11/175,690
? PRIOR FILING DATE: 2005-07-07
? PRIOR APPLICATION NUMBER: PCT/US04/001369
? PRIOR FILING DATE: 2004-01-20
? PRIOR APPLICATION NUMBER: US 60/441,305
? PRIOR FILING DATE: 2003-01-22
? PRIOR APPLICATION NUMBER: US 60/453,201
? PRIOR FILING DATE: 2003-03-11
? PRIOR APPLICATION NUMBER: US 60/467,222
? PRIOR FILING DATE: 2003-05-02
? PRIOR APPLICATION NUMBER: US 60/472,816
? PRIOR FILING DATE: 2003-05-23
? PRIOR APPLICATION NUMBER: US 60/476,267
? PRIOR FILING DATE: 2003-06-06
? PRIOR APPLICATION NUMBER: US 60/505,172
? PRIOR FILING DATE: 2003-09-24
? PRIOR APPLICATION NUMBER: US 60/506,746
? PRIOR FILING DATE: 2003-09-30
? NUMBER OF SEQ ID NOS: 568
? SOFTWARE: PatentIn Ver. 2.0
? SEQ ID NO 223
? TYPE: PRF
? ORGANISM: Homo sapiens
US-11-175-690-223

Query Match      66.8%; Score 309.5; DB 7; Length 646;
Best Local Similarity 75.9%; Pred. No. 3.1e-27;
Matches 63; Conservative 5; Mismatches 14; Indels 1; Gaps 1;

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QY 1 MNIFYIFLFLSVQGLQHTHTHRGSLDKRHGEGTFTSDVSSYLEGQAAKEFTAMLVKGRH 60
   |||
Db 1 MNIFYIFLFLSVQGLQHTHTHRGSLDKRHGEGTFTSDVSSYLEGQAAKEFTAMLVKGRD 60
QY 61 GEGTFTSDVSSYLEGQAAKEFIA 83
Db 61 AD-AHKSEVAHRFKDGLGEENFKA 82

RESULT 10
? Sequence 221, Application US/11175690
? Publication No. US20060014254A1
? GENERAL INFORMATION:
? APPLICANT: Haseltine et al.
? TITLE OF INVENTION: Albumin Fusion Proteins
? FILE REFERENCE: PF605
? CURRENT APPLICATION NUMBER: US/11/175,690
? PRIOR FILING DATE: 2005-07-07
? PRIOR APPLICATION NUMBER: PCT/US04/001369
? PRIOR FILING DATE: 2004-01-20
? PRIOR APPLICATION NUMBER: US 60/441,305
? PRIOR FILING DATE: 2003-01-22
? PRIOR APPLICATION NUMBER: US 60/453,201
? PRIOR FILING DATE: 2003-03-11
? PRIOR APPLICATION NUMBER: US 60/467,222
? PRIOR FILING DATE: 2003-05-02
? PRIOR APPLICATION NUMBER: US 60/472,816
? PRIOR FILING DATE: 2003-06-06
? PRIOR APPLICATION NUMBER: US 60/476,267
? PRIOR FILING DATE: 2003-09-24
? PRIOR APPLICATION NUMBER: US 60/505,172
? PRIOR FILING DATE: 2003-09-24
? PRIOR APPLICATION NUMBER: US 60/506,746
? PRIOR FILING DATE: 2003-09-30
? NUMBER OF SEQ ID NOS: 568
? SOFTWARE: PatentIn Ver. 2.0
? SEQ ID NO 221
? LENGTH: 659
? TYPE: PRF
? ORGANISM: Homo sapiens
US-11-175-690-221

Query Match      66.5%; Score 309.5; DB 7; Length 659;
Best Local Similarity 76.5%; Pred. No. 3.2e-27;
Matches 65; Conservative 4; Mismatches 11; Indels 5; Gaps 2;

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QY 1 MNIFYIFLFLSVQGLQHTHTHRGSLDKRHGEGTFTSDVSSYLEGQAAKEFTAMLVKGRH 60
   |||
Db 1 MNIFYIFLFLSVQGLQHTHTHRGSLDKRHGEGTFTSDVSSYLEGQAAKEFTAMLVKGRD 60
QY 61 GEGTFTSDVSSYLEGQAAKEFIA 83
Db 61 AH--KSEVAHRFKDGLGEENFKA 82

RESULT 11
? Sequence 224, Application US/11175690
? Publication No. US20060014254A1
? GENERAL INFORMATION:
? APPLICANT: Haseltine et al.
? TITLE OF INVENTION: Albumin Fusion Proteins
? FILE REFERENCE: PF605
? CURRENT APPLICATION NUMBER: US/11/175,690
? PRIOR FILING DATE: 2005-07-07
? PRIOR APPLICATION NUMBER: PCT/US04/001369
? PRIOR FILING DATE: 2004-01-20
? PRIOR APPLICATION NUMBER: US 60/441,305
? PRIOR FILING DATE: 2003-01-22
? PRIOR APPLICATION NUMBER: US 60/453,201
? PRIOR FILING DATE: 2003-03-11

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; LENGTH: 654
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-175-690-219

Query Match 66.2%; Score 308; DB 7; Length 654;
Best Local Similarity 100.0%; Pred. No. 4.7e-27;
Matches 59; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNIFYYIFLFLISFVQGLPHTHRSGSLDKRHGEGTFTSDVSSYLEGQAQAKKFFIAMLVKGR 59
DB 1 MNIFYYIFLFLISFVQGLPHTHRSGSLDKRHGEGTFTSDVSSYLEGQAQAKKFFIAMLVKGR 59

RESULT 15

US-11-175-690-220
; Sequence 220, Application US/11175690
; Publication No. US20060014254A1
; GENERAL INFORMATION:
; APPLICANT: Haseltine et al.
; TITLE OR INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PR605
; CURRENT APPLICATION NUMBER: US/11/175,690
; CURRENT FILING DATE: 2005-07-07
; PRIOR APPLICATION NUMBER: PCT/US04/001369
; PRIOR FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: US 60/441,305
; PRIOR FILING DATE: 2003-01-22 60/453,201
; PRIOR APPLICATION NUMBER: US 60/453,201
; PRIOR FILING DATE: 2003-03-11
; PRIOR APPLICATION NUMBER: US 60/467,222
; PRIOR FILING DATE: 2003-05-02
; PRIOR APPLICATION NUMBER: US 60/472,816
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 60/476,267
; PRIOR FILING DATE: 2003-06-06
; PRIOR APPLICATION NUMBER: US 60/505,172
; PRIOR FILING DATE: 2003-09-24
; PRIOR APPLICATION NUMBER: US 60/506,746
; PRIOR FILING DATE: 2003-09-30
; NUMBER OF SEQ ID NOS: 568
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 220
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-175-690-220

Query Match 66.2%; Score 308; DB 7; Length 655;
Best Local Similarity 100.0%; Pred. No. 4.7e-27;
Matches 59; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNIFYYIFLFLISFVQGLPHTHRSGSLDKRHGEGTFTSDVSSYLEGQAQAKKFFIAMLVKGR 59
DB 1 MNIFYYIFLFLISFVQGLPHTHRSGSLDKRHGEGTFTSDVSSYLEGQAQAKKFFIAMLVKGR 59

Search completed: April 19, 2006, 12:36:43
Job time : 3.97088 secs